

WEBVTT

NOTE duration: "00:58:55.616"

NOTE Confidence: 0.8143271

00:00:00.399 --> 00:00:02.159 Yeah. I'm Anne Chang and

NOTE Confidence: 0.8143271

00:00:02.159 --> 00:00:04.000 I have been running, Smilo

NOTE Confidence: 0.8143271

00:00:04.000 --> 00:00:06.160 shares with primary care Zoom

NOTE Confidence: 0.8143271

00:00:06.160 --> 00:00:07.140 lecture series,

NOTE Confidence: 0.9953532

00:00:08.160 --> 00:00:09.920 and the idea is that

NOTE Confidence: 0.9953532

00:00:09.920 --> 00:00:11.759 we are focusing on areas

NOTE Confidence: 0.9953532

00:00:11.759 --> 00:00:14.160 of overlap between primary care

NOTE Confidence: 0.9953532

00:00:14.160 --> 00:00:14.980 and oncology,

NOTE Confidence: 0.9976079

00:00:15.505 --> 00:00:17.505 whether that's cancer screening, cancer

NOTE Confidence: 0.9976079

00:00:17.505 --> 00:00:18.005 diagnosis,

NOTE Confidence: 0.9952713

00:00:18.785 --> 00:00:20.065 figuring out what to do

NOTE Confidence: 0.9952713

00:00:20.065 --> 00:00:21.185 with something that might be

NOTE Confidence: 0.9952713

00:00:21.185 --> 00:00:22.864 cancer, or following up after

NOTE Confidence: 0.9952713

00:00:22.864 --> 00:00:23.845 somebody's recovered

NOTE Confidence: 0.99877

00:00:24.225 --> 00:00:25.045 from cancer.
NOTE Confidence: 0.97526497

00:00:26.625 --> 00:00:27.825 This is our third year,
NOTE Confidence: 0.97526497

00:00:27.825 --> 00:00:30.120 and today's session is just
NOTE Confidence: 0.97526497

00:00:30.280 --> 00:00:31.640 as wonderful, if not more
NOTE Confidence: 0.97526497

00:00:31.640 --> 00:00:32.680 so, than all of the
NOTE Confidence: 0.97526497

00:00:32.680 --> 00:00:33.740 others. And I think,
NOTE Confidence: 0.9954035

00:00:34.200 --> 00:00:35.580 you will find it,
NOTE Confidence: 0.998689

00:00:36.360 --> 00:00:38.860 excellent. The topic is pancreatic
NOTE Confidence: 0.9845839

00:00:39.320 --> 00:00:40.620 cysts and cancer.
NOTE Confidence: 0.97834015

00:00:41.400 --> 00:00:42.760 As you know, we're finding
NOTE Confidence: 0.97834015

00:00:42.760 --> 00:00:44.940 a lot more pancreatic lesions,
NOTE Confidence: 0.97834015

00:00:45.080 --> 00:00:47.045 and lots of guidance is
NOTE Confidence: 0.97834015

00:00:47.045 --> 00:00:48.805 needed, and, it is here
NOTE Confidence: 0.97834015

00:00:48.805 --> 00:00:49.305 today.
NOTE Confidence: 0.9905455

00:00:50.885 --> 00:00:52.325 As always, we are joined
NOTE Confidence: 0.9905455

00:00:52.325 --> 00:00:53.465 by an NEMG

NOTE Confidence: 0.9063053
00:00:54.325 --> 00:00:56.325 primary care colleague as well
NOTE Confidence: 0.9063053
00:00:56.325 --> 00:00:58.725 as specialist from Spinal Cancer
NOTE Confidence: 0.9063053
00:00:58.725 --> 00:00:59.225 Center.
NOTE Confidence: 0.9344884
00:00:59.690 --> 00:01:02.430 I'll introduce Flora Zarku Power,
NOTE Confidence: 0.98999584
00:01:02.810 --> 00:01:04.730 who is a colleague at
NOTE Confidence: 0.98999584
00:01:04.730 --> 00:01:06.190 Northeast Medical Group.
NOTE Confidence: 0.9451632
00:01:07.050 --> 00:01:08.170 She is a graduate of
NOTE Confidence: 0.9451632
00:01:08.170 --> 00:01:09.690 the University of Medicine in
NOTE Confidence: 0.9451632
00:01:09.690 --> 00:01:11.069 Karol Davila, Bucharest,
NOTE Confidence: 0.8110028
00:01:11.450 --> 00:01:11.950 Romania,
NOTE Confidence: 0.9937739
00:01:12.445 --> 00:01:14.205 and completed her internal medicine
NOTE Confidence: 0.9937739
00:01:14.205 --> 00:01:15.745 residency at New York Presbyterian
NOTE Confidence: 0.9937739
00:01:15.965 --> 00:01:17.185 Hospital in Queens.
NOTE Confidence: 0.98346794
00:01:18.285 --> 00:01:20.205 She joined the medical staff
NOTE Confidence: 0.98346794
00:01:20.205 --> 00:01:21.905 of Yale New Haven Hospital
NOTE Confidence: 0.98346794

00:01:22.205 --> 00:01:23.725 several years ago as a
NOTE Confidence: 0.98346794

00:01:23.725 --> 00:01:25.345 hospitalist before joining
NOTE Confidence: 0.99247295

00:01:25.940 --> 00:01:27.800 into our community practices
NOTE Confidence: 0.9991849

00:01:28.260 --> 00:01:29.000 in Milford.
NOTE Confidence: 0.9389106

00:01:29.380 --> 00:01:30.920 She's now both a practicing
NOTE Confidence: 0.9389106

00:01:30.980 --> 00:01:32.500 physician and a managing partner
NOTE Confidence: 0.9389106

00:01:32.500 --> 00:01:33.780 of PrimeMed, which is part
NOTE Confidence: 0.9389106

00:01:33.780 --> 00:01:35.720 of a Northeast Medical Group.
NOTE Confidence: 0.96490455

00:01:36.260 --> 00:01:37.540 She's an active member of
NOTE Confidence: 0.96490455

00:01:37.540 --> 00:01:38.900 the Milford and Bridgeport area
NOTE Confidence: 0.96490455

00:01:38.900 --> 00:01:40.580 medical community. She served on
NOTE Confidence: 0.96490455

00:01:40.580 --> 00:01:42.315 executive medical staff committee at
NOTE Confidence: 0.96490455

00:01:42.315 --> 00:01:43.295 Bridgeport Hospital
NOTE Confidence: 0.9220798

00:01:43.675 --> 00:01:45.435 and participated in the Emerging
NOTE Confidence: 0.9220798

00:01:45.435 --> 00:01:46.795 Leadership Program through the Yale
NOTE Confidence: 0.9220798

00:01:46.795 --> 00:01:47.775 School of Management.

NOTE Confidence: 0.9785638
00:01:48.315 --> 00:01:50.015 She's a full time active
NOTE Confidence: 0.9785638
00:01:50.235 --> 00:01:50.735 clinician
NOTE Confidence: 0.9831338
00:01:51.355 --> 00:01:53.135 and helps lend her expertise
NOTE Confidence: 0.94250244
00:01:53.515 --> 00:01:55.355 to primary care workflows and
NOTE Confidence: 0.94250244
00:01:55.355 --> 00:01:57.390 especially the Care Signature pathways
NOTE Confidence: 0.94250244
00:01:57.390 --> 00:01:58.990 where she has helped to
NOTE Confidence: 0.94250244
00:01:58.990 --> 00:02:00.670 author more than almost any
NOTE Confidence: 0.94250244
00:02:00.670 --> 00:02:02.750 other primary care clinician that
NOTE Confidence: 0.94250244
00:02:02.750 --> 00:02:03.729 works with us.
NOTE Confidence: 0.9892292
00:02:04.590 --> 00:02:06.290 She strongly believes in Sacrosanct
NOTE Confidence: 0.9892292
00:02:06.509 --> 00:02:08.030 doctor patient relationship as a
NOTE Confidence: 0.9892292
00:02:08.030 --> 00:02:09.630 keystone to great health outcomes,
NOTE Confidence: 0.9892292
00:02:09.630 --> 00:02:10.590 and I think that will
NOTE Confidence: 0.9892292
00:02:10.590 --> 00:02:11.569 come through today.
NOTE Confidence: 0.9555022
00:02:12.275 --> 00:02:13.155 And I'm gonna turn it
NOTE Confidence: 0.9555022

00:02:13.155 --> 00:02:14.355 over to you to introduce
NOTE Confidence: 0.9555022

00:02:14.355 --> 00:02:15.495 our Smiley colleagues.
NOTE Confidence: 0.94391227

00:02:16.755 --> 00:02:17.815 Thank you, Karen.
NOTE Confidence: 0.9320232

00:02:18.115 --> 00:02:19.735 And as always, a pleasure
NOTE Confidence: 0.9320232

00:02:19.875 --> 00:02:20.375 to,
NOTE Confidence: 0.96309745

00:02:21.315 --> 00:02:22.595 host this with you, and,
NOTE Confidence: 0.9943406

00:02:23.555 --> 00:02:24.675 we have a great program
NOTE Confidence: 0.9943406

00:02:24.675 --> 00:02:25.955 tonight. So we have doctor
NOTE Confidence: 0.9943406

00:02:25.955 --> 00:02:26.775 James Farrell,
NOTE Confidence: 0.96944284

00:02:27.190 --> 00:02:28.950 professor of medicine and surgery
NOTE Confidence: 0.96944284

00:02:28.950 --> 00:02:30.069 and director of the Yale
NOTE Confidence: 0.96944284

00:02:30.069 --> 00:02:31.690 Center for pancreatic disease.
NOTE Confidence: 0.9397385

00:02:32.069 --> 00:02:34.150 He's an internationally recognized expert
NOTE Confidence: 0.9397385

00:02:34.150 --> 00:02:35.990 in pancreatic disease treatment and
NOTE Confidence: 0.9397385

00:02:35.990 --> 00:02:36.490 research.
NOTE Confidence: 0.99286705

00:02:37.030 --> 00:02:38.389 In addition to his clinical

NOTE Confidence: 0.99286705
00:02:38.389 --> 00:02:38.889 work,
NOTE Confidence: 0.99008834
00:02:39.270 --> 00:02:40.775 in the on the endoscopic
NOTE Confidence: 0.99008834
00:02:40.995 --> 00:02:42.935 evaluation of autoimmune pancreatitis
NOTE Confidence: 0.97469443
00:02:43.235 --> 00:02:44.834 and pancreatic cysts, he's also
NOTE Confidence: 0.97469443
00:02:44.834 --> 00:02:46.035 known for his development of
NOTE Confidence: 0.97469443
00:02:46.035 --> 00:02:48.775 personalized therapy approaches for pancreatic
NOTE Confidence: 0.97469443
00:02:48.915 --> 00:02:51.415 cancer and early detection biomarkers
NOTE Confidence: 0.97469443
00:02:51.635 --> 00:02:52.935 for pancreatic cancer.
NOTE Confidence: 0.88975364
00:02:53.620 --> 00:02:55.880 He received his medical degree
NOTE Confidence: 0.7938854
00:02:56.419 --> 00:02:59.000 from University College Dublin, Ireland,
NOTE Confidence: 0.9699019
00:02:59.940 --> 00:03:01.620 graduated first in his medical
NOTE Confidence: 0.9699019
00:03:01.620 --> 00:03:02.440 school class.
NOTE Confidence: 0.994979
00:03:02.740 --> 00:03:05.060 He completed internal medicine training
NOTE Confidence: 0.994979
00:03:05.060 --> 00:03:06.120 at Johns Hopkins
NOTE Confidence: 0.9055711
00:03:06.535 --> 00:03:08.635 and then both a, gastroenterology
NOTE Confidence: 0.96300507

00:03:09.895 --> 00:03:10.395 gastroenterology
NOTE Confidence: 0.9888656

00:03:11.014 --> 00:03:12.235 and advanced therapeutic
NOTE Confidence: 0.99413204

00:03:12.615 --> 00:03:13.755 endoscopic fellowship
NOTE Confidence: 0.87316334

00:03:14.215 --> 00:03:15.514 at MGH in Hartford,
NOTE Confidence: 0.8817115

00:03:15.815 --> 00:03:17.195 medical school in Boston.
NOTE Confidence: 0.94048184

00:03:18.055 --> 00:03:19.335 After fellowship, he went to
NOTE Confidence: 0.94048184

00:03:19.335 --> 00:03:20.875 UCLA Medical Center
NOTE Confidence: 0.9982651

00:03:22.430 --> 00:03:23.409 where he developed,
NOTE Confidence: 0.9804296

00:03:24.190 --> 00:03:26.510 the largest endoscopic ultrasound program
NOTE Confidence: 0.9804296

00:03:26.510 --> 00:03:28.110 in California and became a
NOTE Confidence: 0.9804296

00:03:28.110 --> 00:03:30.129 founding member of the UCLA
NOTE Confidence: 0.9804296

00:03:30.269 --> 00:03:32.510 Center for Pancreatic Diseases. And
NOTE Confidence: 0.9804296

00:03:32.510 --> 00:03:33.870 in two thousand thirteen, he
NOTE Confidence: 0.9804296

00:03:33.870 --> 00:03:35.295 was recruited to lead the
NOTE Confidence: 0.9804296

00:03:35.295 --> 00:03:37.055 Yale Center for pancreatic diseases
NOTE Confidence: 0.9804296

00:03:37.055 --> 00:03:38.015 at the Yale School of

NOTE Confidence: 0.9804296
00:03:38.015 --> 00:03:38.515 Medicine,
NOTE Confidence: 0.9727744
00:03:39.135 --> 00:03:40.735 while also joining the existing
NOTE Confidence: 0.9727744
00:03:40.735 --> 00:03:42.355 Yale interventional endoscopy
NOTE Confidence: 0.9991697
00:03:43.295 --> 00:03:43.795 program.
NOTE Confidence: 0.8768647
00:03:44.175 --> 00:03:46.015 He currently directs the Smile
NOTE Confidence: 0.8768647
00:03:46.015 --> 00:03:47.535 of Cancer Center high risk
NOTE Confidence: 0.8768647
00:03:47.535 --> 00:03:48.035 pancreas
NOTE Confidence: 0.9729166
00:03:48.495 --> 00:03:50.730 cancer early detection clinic and
NOTE Confidence: 0.9729166
00:03:50.730 --> 00:03:52.670 the Yale Digestive Health pancreatic
NOTE Confidence: 0.9729166
00:03:52.730 --> 00:03:53.470 cyst program.
NOTE Confidence: 0.8966655
00:03:54.650 --> 00:03:56.330 We also have doctor John
NOTE Confidence: 0.8966655
00:03:56.330 --> 00:03:56.830 Kunstmann,
NOTE Confidence: 0.9688864
00:03:57.930 --> 00:03:59.230 and he's MDMHS.
NOTE Confidence: 0.96912265
00:03:59.930 --> 00:04:01.630 He's a board certified surgeon
NOTE Confidence: 0.96912265
00:04:01.850 --> 00:04:03.254 specializing in the care of
NOTE Confidence: 0.96912265

00:04:03.254 --> 00:04:05.095 patients with cancers or benign
NOTE Confidence: 0.96912265

00:04:05.095 --> 00:04:06.855 diseases of the pancreas, liver,
NOTE Confidence: 0.96912265

00:04:06.855 --> 00:04:08.635 bile ducts, stomach, and intestines.
NOTE Confidence: 0.9867985

00:04:09.095 --> 00:04:10.775 He attended medical school at
NOTE Confidence: 0.9867985

00:04:10.775 --> 00:04:12.694 the University of Wisconsin School
NOTE Confidence: 0.9867985

00:04:12.694 --> 00:04:14.235 of Medicine and Public Health.
NOTE Confidence: 0.82326543

00:04:14.614 --> 00:04:15.515 Doctor Kunstmann,
NOTE Confidence: 0.95534396

00:04:16.370 --> 00:04:18.610 completed residency training in general
NOTE Confidence: 0.95534396

00:04:18.610 --> 00:04:20.210 surgery at Yale as well
NOTE Confidence: 0.95534396

00:04:20.210 --> 00:04:22.070 as a fellowship in complex
NOTE Confidence: 0.95534396

00:04:22.130 --> 00:04:24.770 general surgery surgical oncology at
NOTE Confidence: 0.95534396

00:04:24.770 --> 00:04:26.610 Memorial Sloan Kettering Cancer Center
NOTE Confidence: 0.95534396

00:04:26.610 --> 00:04:27.810 in New York City, and
NOTE Confidence: 0.95534396

00:04:27.810 --> 00:04:29.089 he also holds a master's
NOTE Confidence: 0.95534396

00:04:29.089 --> 00:04:30.550 degree from Yale University.
NOTE Confidence: 0.9957328

00:04:31.535 --> 00:04:32.915 He has a special interest

NOTE Confidence: 0.9957328
00:04:33.135 --> 00:04:34.255 in the treatment of patients
NOTE Confidence: 0.9957328
00:04:34.255 --> 00:04:35.775 with cystic diseases of the
NOTE Confidence: 0.9957328
00:04:35.775 --> 00:04:36.275 pancreas,
NOTE Confidence: 0.99000466
00:04:36.575 --> 00:04:38.095 and he maintains an active
NOTE Confidence: 0.99000466
00:04:38.095 --> 00:04:40.035 research program at Yale examining,
NOTE Confidence: 0.98259044
00:04:40.575 --> 00:04:42.415 development of such cystic lesions
NOTE Confidence: 0.98259044
00:04:42.415 --> 00:04:43.635 as well as the genetics
NOTE Confidence: 0.98259044
00:04:43.695 --> 00:04:44.355 of those,
NOTE Confidence: 0.98577094
00:04:44.880 --> 00:04:46.900 of associated pancreatic cancer,
NOTE Confidence: 0.9900215
00:04:47.680 --> 00:04:49.120 and is seeking to improve
NOTE Confidence: 0.9900215
00:04:49.120 --> 00:04:50.560 the outcomes of those patients
NOTE Confidence: 0.9900215
00:04:50.560 --> 00:04:52.639 undergoing pancreatic surgery. So thank
NOTE Confidence: 0.9900215
00:04:52.639 --> 00:04:54.479 you all for attending. And
NOTE Confidence: 0.9900215
00:04:54.479 --> 00:04:55.520 I'm gonna hand it over
NOTE Confidence: 0.9900215
00:04:55.520 --> 00:04:56.180 to Flora.
NOTE Confidence: 0.9813955

00:04:58.645 --> 00:04:59.925 Thank you, Anne. Thank you,
NOTE Confidence: 0.9813955

00:04:59.925 --> 00:05:01.305 Karen, for the warm introduction.
NOTE Confidence: 0.9813955

00:05:01.445 --> 00:05:02.485 I'm delighted to be here
NOTE Confidence: 0.9813955

00:05:02.485 --> 00:05:03.384 with my colleagues.
NOTE Confidence: 0.9957578

00:05:04.565 --> 00:05:05.604 And I wanna say thank
NOTE Confidence: 0.9957578

00:05:05.604 --> 00:05:06.645 you to all those tuning
NOTE Confidence: 0.9957578

00:05:06.645 --> 00:05:07.145 in.
NOTE Confidence: 0.9947

00:05:07.604 --> 00:05:09.445 So why are pancreatic cysts
NOTE Confidence: 0.9947

00:05:09.445 --> 00:05:10.985 being identified more?
NOTE Confidence: 0.9186644

00:05:11.779 --> 00:05:13.779 Well, virtually every American that
NOTE Confidence: 0.9186644

00:05:13.779 --> 00:05:14.900 goes to the doctor with
NOTE Confidence: 0.9186644

00:05:14.900 --> 00:05:17.080 abdominal pain gets an abdominal
NOTE Confidence: 0.9186644

00:05:17.140 --> 00:05:18.180 CT. Or,
NOTE Confidence: 0.9410143

00:05:18.740 --> 00:05:20.020 if you roll through ER,
NOTE Confidence: 0.9410143

00:05:20.020 --> 00:05:20.900 you might be getting a
NOTE Confidence: 0.9410143

00:05:20.900 --> 00:05:21.940 CT even if you don't

NOTE Confidence: 0.9410143
00:05:21.940 --> 00:05:23.080 have abdominal pain.
NOTE Confidence: 0.94165725
00:05:23.535 --> 00:05:24.895 So one study years ago
NOTE Confidence: 0.94165725
00:05:24.895 --> 00:05:26.015 show that two point six
NOTE Confidence: 0.94165725
00:05:26.015 --> 00:05:27.455 percent of patients found to
NOTE Confidence: 0.94165725
00:05:27.455 --> 00:05:29.715 have a pancreatic cyst on
NOTE Confidence: 0.94165725
00:05:29.855 --> 00:05:30.835 CT scan.
NOTE Confidence: 0.9901549
00:05:32.015 --> 00:05:34.195 If you add abdominal ultrasound,
NOTE Confidence: 0.9901549
00:05:34.335 --> 00:05:34.835 MRIs,
NOTE Confidence: 0.9754238
00:05:35.580 --> 00:05:37.820 eventually, this leads to a
NOTE Confidence: 0.9754238
00:05:37.820 --> 00:05:38.940 good number of cysts that
NOTE Confidence: 0.9754238
00:05:38.940 --> 00:05:40.699 are identified every year, more
NOTE Confidence: 0.9754238
00:05:40.699 --> 00:05:41.680 than half a million.
NOTE Confidence: 0.99768114
00:05:43.180 --> 00:05:44.000 Next slide.
NOTE Confidence: 0.9992572
00:05:44.779 --> 00:05:45.839 What is the challenge?
NOTE Confidence: 0.95819825
00:05:46.220 --> 00:05:47.919 Well, there's multi
NOTE Confidence: 0.9896905

00:05:49.265 --> 00:05:49.765 faceted
NOTE Confidence: 0.92657995

00:05:50.145 --> 00:05:51.925 challenges here. So one,
NOTE Confidence: 0.98767275

00:05:52.785 --> 00:05:54.065 finding a pancreatic cyst is
NOTE Confidence: 0.98767275

00:05:54.065 --> 00:05:55.265 concerning for the patient and
NOTE Confidence: 0.98767275

00:05:55.265 --> 00:05:56.005 their family.
NOTE Confidence: 0.9903219

00:05:56.785 --> 00:05:58.464 With patients having access to
NOTE Confidence: 0.9903219

00:05:58.464 --> 00:05:59.665 the health record on the
NOTE Confidence: 0.9903219

00:05:59.665 --> 00:06:00.165 system,
NOTE Confidence: 0.93553

00:06:00.779 --> 00:06:01.740 They might be reading actually
NOTE Confidence: 0.93553

00:06:01.740 --> 00:06:03.199 their CAT scan even before
NOTE Confidence: 0.93553

00:06:03.419 --> 00:06:04.860 you you get to, read
NOTE Confidence: 0.93553

00:06:04.860 --> 00:06:06.539 the report. So that leads
NOTE Confidence: 0.93553

00:06:06.539 --> 00:06:07.839 to fear and angst.
NOTE Confidence: 0.98972046

00:06:08.699 --> 00:06:10.159 It's challenging for the radiologist.
NOTE Confidence: 0.9507728

00:06:11.339 --> 00:06:11.839 They,
NOTE Confidence: 0.9852671

00:06:12.220 --> 00:06:13.705 hedge from time to time,

NOTE Confidence: 0.9852671
00:06:13.705 --> 00:06:15.264 and, that's the basis on
NOTE Confidence: 0.9852671
00:06:15.264 --> 00:06:16.404 which they operate daily.
NOTE Confidence: 0.9904146
00:06:16.785 --> 00:06:17.985 So it is a hard
NOTE Confidence: 0.9904146
00:06:17.985 --> 00:06:19.205 decision to eventually,
NOTE Confidence: 0.9660241
00:06:20.305 --> 00:06:22.225 decide between an overcall versus
NOTE Confidence: 0.9660241
00:06:22.225 --> 00:06:23.925 a realistic risk assessment
NOTE Confidence: 0.9474817
00:06:24.464 --> 00:06:25.585 when they realize that there's
NOTE Confidence: 0.9474817
00:06:25.585 --> 00:06:26.625 something wrong on the CAT
NOTE Confidence: 0.9474817
00:06:26.625 --> 00:06:27.125 scan.
NOTE Confidence: 0.9924782
00:06:28.050 --> 00:06:29.589 It's challenging for the gastroenterologist.
NOTE Confidence: 0.9923714
00:06:30.610 --> 00:06:31.729 Thank you, James, for pointing
NOTE Confidence: 0.9923714
00:06:31.729 --> 00:06:33.490 this out. It's tough to
NOTE Confidence: 0.9923714
00:06:33.490 --> 00:06:35.029 decide who needs an endoscopic
NOTE Confidence: 0.9923714
00:06:35.089 --> 00:06:35.589 ultrasound
NOTE Confidence: 0.9503863
00:06:36.210 --> 00:06:37.169 and who needs to be
NOTE Confidence: 0.9503863

00:06:37.169 --> 00:06:38.629 surveyed and how.
NOTE Confidence: 0.99057764

00:06:39.970 --> 00:06:41.029 Of course, lastly,
NOTE Confidence: 0.9995946

00:06:41.824 --> 00:06:42.324 but
NOTE Confidence: 0.86660355

00:06:42.705 --> 00:06:44.085 most importantly, probably,
NOTE Confidence: 0.9650126

00:06:44.544 --> 00:06:46.005 it's challenging for the surgeon.
NOTE Confidence: 0.9650126

00:06:46.305 --> 00:06:47.445 Like any oncologic
NOTE Confidence: 0.99804944

00:06:48.225 --> 00:06:48.725 disease,
NOTE Confidence: 0.99806255

00:06:49.264 --> 00:06:50.385 it is a matter of
NOTE Confidence: 0.99806255

00:06:50.385 --> 00:06:50.885 balancing
NOTE Confidence: 0.9700493

00:06:51.264 --> 00:06:52.625 biology of the lesion, which
NOTE Confidence: 0.9700493

00:06:52.625 --> 00:06:54.165 sometimes is not known,
NOTE Confidence: 0.99478984

00:06:54.705 --> 00:06:56.305 with the comorbidities of the
NOTE Confidence: 0.99478984

00:06:56.305 --> 00:06:56.805 patient
NOTE Confidence: 0.85543835

00:06:57.120 --> 00:06:57.860 and certainly,
NOTE Confidence: 0.8643487

00:06:58.560 --> 00:06:59.779 location of the lesion.
NOTE Confidence: 0.9248389

00:07:00.240 --> 00:07:01.680 Pancreatic cysts reside in a

NOTE Confidence: 0.9248389

00:07:01.680 --> 00:07:03.620 very high priced real estate.

NOTE Confidence: 0.8758981

00:07:03.920 --> 00:07:05.360 A pancreas is surrounded by

NOTE Confidence: 0.8758981

00:07:05.360 --> 00:07:06.580 very important structures.

NOTE Confidence: 0.9564053

00:07:07.120 --> 00:07:09.520 And, obviously, considering the technical

NOTE Confidence: 0.9564053

00:07:09.520 --> 00:07:11.120 aspects of the operations as

NOTE Confidence: 0.9564053

00:07:11.120 --> 00:07:13.215 well, which, altogether

NOTE Confidence: 0.9805279

00:07:13.595 --> 00:07:15.195 could lead to certainly a

NOTE Confidence: 0.9805279

00:07:15.195 --> 00:07:16.495 tough decision to make.

NOTE Confidence: 0.9972662

00:07:17.355 --> 00:07:18.895 So what are today's objectives?

NOTE Confidence: 0.95568955

00:07:19.755 --> 00:07:20.955 Well, we're gonna learn about

NOTE Confidence: 0.95568955

00:07:20.955 --> 00:07:22.795 cyst management and surveillance of

NOTE Confidence: 0.95568955

00:07:22.795 --> 00:07:23.970 the pancreatic cyst.

NOTE Confidence: 0.97485733

00:07:24.930 --> 00:07:25.970 We're gonna learn about the

NOTE Confidence: 0.97485733

00:07:25.970 --> 00:07:27.570 most common pancreatic cyst and

NOTE Confidence: 0.97485733

00:07:27.570 --> 00:07:29.110 their characteristic features.

NOTE Confidence: 0.9627161

00:07:30.450 --> 00:07:31.570 We're gonna hear about what
NOTE Confidence: 0.9627161

00:07:31.570 --> 00:07:32.610 tools we have to help
NOTE Confidence: 0.9627161

00:07:32.610 --> 00:07:34.290 distinguish benign cyst from those
NOTE Confidence: 0.9627161

00:07:34.290 --> 00:07:35.510 with malignant potential,
NOTE Confidence: 0.9311684

00:07:35.970 --> 00:07:37.570 how helpful these tools are
NOTE Confidence: 0.9311684

00:07:37.570 --> 00:07:39.190 and how to interpret them,
NOTE Confidence: 0.9884264

00:07:39.605 --> 00:07:40.905 and hoping that,
NOTE Confidence: 0.94113904

00:07:41.445 --> 00:07:43.385 we learn more about identifying
NOTE Confidence: 0.94113904

00:07:43.525 --> 00:07:45.145 cysts at risk for progression,
NOTE Confidence: 0.9960284

00:07:45.685 --> 00:07:47.445 which certainly provides a great
NOTE Confidence: 0.9960284

00:07:47.445 --> 00:07:49.125 opportunity for early detection and
NOTE Confidence: 0.9960284

00:07:49.125 --> 00:07:50.105 cancer prevention.
NOTE Confidence: 0.9391479

00:07:53.090 --> 00:07:54.130 So a few words about
NOTE Confidence: 0.9391479

00:07:54.130 --> 00:07:55.350 prevalence and incidence.
NOTE Confidence: 0.8772594

00:07:55.810 --> 00:07:56.630 So, overall,
NOTE Confidence: 0.9830281

00:07:57.330 --> 00:07:58.610 the risk of malignancy in

NOTE Confidence: 0.9830281
00:07:58.610 --> 00:08:00.130 pancreatic cyst is zero point
NOTE Confidence: 0.9830281
00:08:00.130 --> 00:08:01.250 five to one point five
NOTE Confidence: 0.9830281
00:08:01.250 --> 00:08:03.010 percent, and the annual risk
NOTE Confidence: 0.9830281
00:08:03.010 --> 00:08:04.290 of progression is about zero
NOTE Confidence: 0.9830281
00:08:04.290 --> 00:08:05.270 point five percent.
NOTE Confidence: 0.98782533
00:08:06.610 --> 00:08:07.110 So
NOTE Confidence: 0.9586916
00:08:07.705 --> 00:08:09.145 the good part the good
NOTE Confidence: 0.9586916
00:08:09.145 --> 00:08:10.985 news tonight is that most
NOTE Confidence: 0.9586916
00:08:10.985 --> 00:08:13.225 pancreatic cysts are benign. Even
NOTE Confidence: 0.9586916
00:08:13.225 --> 00:08:14.745 though we recognize and we
NOTE Confidence: 0.9586916
00:08:14.745 --> 00:08:17.065 find actually, on imaging so
NOTE Confidence: 0.9586916
00:08:17.065 --> 00:08:17.465 many,
NOTE Confidence: 0.9291747
00:08:18.265 --> 00:08:19.785 most pancreatic cysts, the vast,
NOTE Confidence: 0.9291747
00:08:19.785 --> 00:08:21.165 the vast majority are benign.
NOTE Confidence: 0.9291747
00:08:21.305 --> 00:08:22.105 So if I want you
NOTE Confidence: 0.9291747

00:08:22.105 --> 00:08:23.740 to take a home message
NOTE Confidence: 0.9291747

00:08:23.880 --> 00:08:25.259 tonight, I think this
NOTE Confidence: 0.9314789

00:08:25.800 --> 00:08:27.820 is underlying that they are
NOTE Confidence: 0.9314789

00:08:27.960 --> 00:08:29.340 most of the times benign.
NOTE Confidence: 0.9314789

00:08:29.560 --> 00:08:30.840 Only a subset, though, has
NOTE Confidence: 0.9314789

00:08:30.840 --> 00:08:31.900 malignant potential.
NOTE Confidence: 0.9972217

00:08:32.760 --> 00:08:33.740 So in,
NOTE Confidence: 0.8850809

00:08:34.120 --> 00:08:35.880 imaging studies, we've been seeing
NOTE Confidence: 0.8850809

00:08:35.880 --> 00:08:37.574 that prevalence is probably two
NOTE Confidence: 0.8850809

00:08:37.574 --> 00:08:38.554 to fifteen percent.
NOTE Confidence: 0.89757913

00:08:38.934 --> 00:08:40.694 Autopsy data suggests a prevalence
NOTE Confidence: 0.89757913

00:08:40.694 --> 00:08:41.894 that's higher as high as
NOTE Confidence: 0.89757913

00:08:41.894 --> 00:08:42.714 fifty percent.
NOTE Confidence: 0.981897

00:08:43.894 --> 00:08:45.434 And there are some premalignant
NOTE Confidence: 0.9972588

00:08:46.054 --> 00:08:46.554 lesions
NOTE Confidence: 0.9839585

00:08:47.014 --> 00:08:47.754 that were,

NOTE Confidence: 0.99592686
00:08:48.214 --> 00:08:50.615 recognized as the, the sole
NOTE Confidence: 0.99592686
00:08:50.615 --> 00:08:51.115 precursors
NOTE Confidence: 0.94220203
00:08:51.639 --> 00:08:52.860 of malignant transformation
NOTE Confidence: 0.9661925
00:08:53.320 --> 00:08:54.779 on cross sectional studies.
NOTE Confidence: 0.96826184
00:08:55.160 --> 00:08:56.440 And those were introduced in
NOTE Confidence: 0.96826184
00:08:56.440 --> 00:08:58.279 nineteen ninety six. The terms
NOTE Confidence: 0.96826184
00:08:58.279 --> 00:08:59.820 mucinous cystic neoplasm
NOTE Confidence: 0.90732265
00:09:00.360 --> 00:09:01.019 and intraductal
NOTE Confidence: 0.9927342
00:09:01.320 --> 00:09:02.779 papillary mucinous neoplasm
NOTE Confidence: 0.9295928
00:09:03.160 --> 00:09:04.440 were introduced at that time,
NOTE Confidence: 0.9898346
00:09:05.225 --> 00:09:06.585 to describe the most common
NOTE Confidence: 0.9898346
00:09:06.585 --> 00:09:07.885 premalignant cysts.
NOTE Confidence: 0.9722047
00:09:08.985 --> 00:09:10.985 Historically and interestingly enough, back
NOTE Confidence: 0.9722047
00:09:10.985 --> 00:09:12.825 in nineteen thirty four, pancreatic
NOTE Confidence: 0.9722047
00:09:12.825 --> 00:09:14.505 cystic lesions were considered very
NOTE Confidence: 0.9722047

00:09:14.505 --> 00:09:16.684 rare, and they became recognized
NOTE Confidence: 0.9722047

00:09:16.825 --> 00:09:18.525 more common and potentially premalignant
NOTE Confidence: 0.9722047

00:09:18.745 --> 00:09:19.705 over the years, over the
NOTE Confidence: 0.9722047

00:09:19.705 --> 00:09:20.205 decades.
NOTE Confidence: 0.9771473

00:09:23.040 --> 00:09:24.720 So here's a bunch of
NOTE Confidence: 0.9771473

00:09:24.720 --> 00:09:26.559 studies that look at various
NOTE Confidence: 0.9771473

00:09:26.559 --> 00:09:27.940 rate number of radiologic,
NOTE Confidence: 0.95557207

00:09:28.800 --> 00:09:29.300 studies,
NOTE Confidence: 0.8445898

00:09:29.839 --> 00:09:31.520 CAT scans and MRIs to
NOTE Confidence: 0.8445898

00:09:31.520 --> 00:09:33.440 again demonstrate the prevalence of,
NOTE Confidence: 0.8816811

00:09:34.904 --> 00:09:35.565 of defining,
NOTE Confidence: 0.93359107

00:09:36.345 --> 00:09:38.345 a pancreatic cyst, which could
NOTE Confidence: 0.93359107

00:09:38.345 --> 00:09:39.945 run from anywhere one to
NOTE Confidence: 0.93359107

00:09:39.945 --> 00:09:40.445 forty.
NOTE Confidence: 0.9325592

00:09:40.824 --> 00:09:42.345 One in forty to one
NOTE Confidence: 0.9325592

00:09:42.345 --> 00:09:44.684 in three imaging showing pancreatic

NOTE Confidence: 0.9325592
00:09:44.745 --> 00:09:45.245 cysts.
NOTE Confidence: 0.9897844
00:09:46.105 --> 00:09:47.225 Again, the good news is
NOTE Confidence: 0.9897844
00:09:47.225 --> 00:09:48.345 that the risk of cancer
NOTE Confidence: 0.9897844
00:09:48.345 --> 00:09:49.304 at the time of imaging
NOTE Confidence: 0.9897844
00:09:49.304 --> 00:09:50.620 is very low, zero point
NOTE Confidence: 0.9897844
00:09:50.620 --> 00:09:51.600 twenty five percent.
NOTE Confidence: 0.9623072
00:09:54.779 --> 00:09:56.059 A modern estimate of cyst
NOTE Confidence: 0.9623072
00:09:56.059 --> 00:09:57.260 prevalence, this is from the
NOTE Confidence: 0.9623072
00:09:57.260 --> 00:09:58.000 West Coast,
NOTE Confidence: 0.9905351
00:09:58.860 --> 00:10:00.300 shows us that if you're
NOTE Confidence: 0.9905351
00:10:00.300 --> 00:10:02.320 eighty years old, you have
NOTE Confidence: 0.9905351
00:10:02.380 --> 00:10:03.440 one in two chances
NOTE Confidence: 0.9988451
00:10:03.820 --> 00:10:04.320 to
NOTE Confidence: 0.91819507
00:10:04.635 --> 00:10:05.934 be identified with the pancreatic
NOTE Confidence: 0.91819507
00:10:05.995 --> 00:10:07.135 cyst on an imaging.
NOTE Confidence: 0.9611142

00:10:07.515 --> 00:10:09.355 If you're seventy, one in
NOTE Confidence: 0.9611142

00:10:09.355 --> 00:10:09.855 three.
NOTE Confidence: 0.9720499

00:10:10.315 --> 00:10:12.475 If you're sixty, one in
NOTE Confidence: 0.9720499

00:10:12.475 --> 00:10:13.675 four, and it goes just
NOTE Confidence: 0.9720499

00:10:13.675 --> 00:10:14.955 like that. If you are
NOTE Confidence: 0.9720499

00:10:14.955 --> 00:10:15.455 fifty,
NOTE Confidence: 0.98411113

00:10:15.835 --> 00:10:16.815 one in five.
NOTE Confidence: 0.98767525

00:10:17.170 --> 00:10:19.190 Majority of cysts are small.
NOTE Confidence: 0.98767525

00:10:19.490 --> 00:10:21.410 Obviously, the risky ones are
NOTE Confidence: 0.98767525

00:10:21.410 --> 00:10:22.470 those that are larger.
NOTE Confidence: 0.96998906

00:10:25.650 --> 00:10:27.350 And here's the map and
NOTE Confidence: 0.96998906

00:10:27.410 --> 00:10:28.850 placing some cysts on the
NOTE Confidence: 0.96998906

00:10:28.850 --> 00:10:29.990 pancreatic map.
NOTE Confidence: 0.9983542

00:10:30.530 --> 00:10:31.030 So
NOTE Confidence: 0.99609053

00:10:31.665 --> 00:10:32.945 if you were to have
NOTE Confidence: 0.99609053

00:10:32.945 --> 00:10:33.605 a cyst,

NOTE Confidence: 0.9679286
00:10:33.985 --> 00:10:34.945 probably the best one to
NOTE Confidence: 0.9679286
00:10:34.945 --> 00:10:36.065 have will be the serous,
NOTE Confidence: 0.9679286
00:10:36.065 --> 00:10:36.885 cyst adenoma.
NOTE Confidence: 0.9956414
00:10:37.505 --> 00:10:38.865 These are benign. They do
NOTE Confidence: 0.9956414
00:10:38.865 --> 00:10:40.325 not have malignant potential.
NOTE Confidence: 0.92668176
00:10:40.945 --> 00:10:42.545 They're easy sometimes to recognize
NOTE Confidence: 0.92668176
00:10:42.545 --> 00:10:43.900 if they're classic on an
NOTE Confidence: 0.92668176
00:10:43.900 --> 00:10:45.660 imaging. They have this central
NOTE Confidence: 0.92668176
00:10:45.660 --> 00:10:47.020 calcification as you see on
NOTE Confidence: 0.92668176
00:10:47.020 --> 00:10:48.000 this, pictogram.
NOTE Confidence: 0.9694121
00:10:49.420 --> 00:10:49.920 And,
NOTE Confidence: 0.9203796
00:10:50.380 --> 00:10:51.340 again, they,
NOTE Confidence: 0.99533844
00:10:51.820 --> 00:10:52.860 do not pose a risk
NOTE Confidence: 0.99533844
00:10:52.860 --> 00:10:53.840 unless they grow
NOTE Confidence: 0.9810976
00:10:54.620 --> 00:10:55.440 in size.
NOTE Confidence: 0.91918415

00:10:56.140 --> 00:10:57.615 Then we are dealing with
NOTE Confidence: 0.91918415

00:10:57.695 --> 00:10:58.815 occasionally, with benign,
NOTE Confidence: 0.98528945

00:10:59.135 --> 00:11:01.075 pancreatic cysts. Those are inflammatory
NOTE Confidence: 0.98528945

00:11:01.375 --> 00:11:02.255 cysts, which you could see
NOTE Confidence: 0.98528945

00:11:02.255 --> 00:11:02.995 in the tail.
NOTE Confidence: 0.9569628

00:11:03.695 --> 00:11:04.895 And then we are dealing
NOTE Confidence: 0.9569628

00:11:04.895 --> 00:11:06.895 with the mucinous cysts, which
NOTE Confidence: 0.9569628

00:11:06.895 --> 00:11:08.195 are the IPMNs.
NOTE Confidence: 0.96904624

00:11:08.975 --> 00:11:10.649 And you see here an
NOTE Confidence: 0.96904624

00:11:10.649 --> 00:11:12.110 IPMN of the main pancreatic
NOTE Confidence: 0.96904624

00:11:12.250 --> 00:11:14.410 duct and then IPMNs of
NOTE Confidence: 0.96904624

00:11:14.410 --> 00:11:15.870 the side branch ducts
NOTE Confidence: 0.7103566

00:11:16.649 --> 00:11:17.870 and the
NOTE Confidence: 0.9209868

00:11:18.490 --> 00:11:21.230 mucinous cyst adenoma or pseudobapillary
NOTE Confidence: 0.98683774

00:11:21.850 --> 00:11:22.350 neoplasm.
NOTE Confidence: 0.9835077

00:11:23.129 --> 00:11:25.069 So the mucinous cyst actually

NOTE Confidence: 0.9835077
00:11:25.129 --> 00:11:25.629 become
NOTE Confidence: 0.9617594
00:11:28.515 --> 00:11:30.434 the most common cyst that
NOTE Confidence: 0.9617594
00:11:30.434 --> 00:11:33.175 could transform into into cancer.
NOTE Confidence: 0.97583514
00:11:33.554 --> 00:11:35.075 So talking about the benign
NOTE Confidence: 0.97583514
00:11:35.075 --> 00:11:35.575 cysts,
NOTE Confidence: 0.95776093
00:11:36.195 --> 00:11:38.434 they actually are about fifteen
NOTE Confidence: 0.95776093
00:11:38.434 --> 00:11:39.315 to twenty five percent of
NOTE Confidence: 0.95776093
00:11:39.315 --> 00:11:40.530 all the pancreatic cysts.
NOTE Confidence: 0.9588731
00:11:41.410 --> 00:11:42.770 And the mucinous cysts,
NOTE Confidence: 0.9646475
00:11:43.330 --> 00:11:45.590 amount to about fifty percent,
NOTE Confidence: 0.97059184
00:11:46.610 --> 00:11:48.050 of, the cysts that are
NOTE Confidence: 0.97059184
00:11:48.050 --> 00:11:50.210 found incidentally on imaging for
NOTE Confidence: 0.97059184
00:11:50.210 --> 00:11:51.110 other indications.
NOTE Confidence: 0.9972024
00:11:53.365 --> 00:11:53.865 So
NOTE Confidence: 0.9843175
00:11:54.565 --> 00:11:55.525 when dealing with,
NOTE Confidence: 0.98722404

00:11:56.005 --> 00:11:57.445 an asymptomatic patient who has

NOTE Confidence: 0.98722404

00:11:57.445 --> 00:11:58.745 a pancreatic cyst,

NOTE Confidence: 0.9953497

00:11:59.365 --> 00:12:00.405 one of the most important

NOTE Confidence: 0.9953497

00:12:00.405 --> 00:12:01.625 aspects is identifying

NOTE Confidence: 0.96627915

00:12:01.925 --> 00:12:03.205 what type of cyst we're

NOTE Confidence: 0.96627915

00:12:03.205 --> 00:12:04.105 dealing with.

NOTE Confidence: 0.9908342

00:12:05.605 --> 00:12:06.105 And

NOTE Confidence: 0.98801434

00:12:06.600 --> 00:12:07.100 obviously,

NOTE Confidence: 0.875231

00:12:07.559 --> 00:12:08.059 considering,

NOTE Confidence: 0.9498586

00:12:08.519 --> 00:12:09.980 the risk factors, comorbidities,

NOTE Confidence: 0.9350852

00:12:10.519 --> 00:12:12.620 and then what strategy

NOTE Confidence: 0.83931684

00:12:13.480 --> 00:12:14.380 will be employed

NOTE Confidence: 0.9919664

00:12:14.920 --> 00:12:16.600 to treat this patient or

NOTE Confidence: 0.9919664

00:12:16.600 --> 00:12:17.100 surveil

NOTE Confidence: 0.95983917

00:12:17.480 --> 00:12:19.865 or follow-up over time. So

NOTE Confidence: 0.95983917

00:12:19.865 --> 00:12:21.225 on the left side here,

NOTE Confidence: 0.95983917
00:12:21.225 --> 00:12:22.845 you see the non neoplastic
NOTE Confidence: 0.95983917
00:12:23.065 --> 00:12:24.605 cysts, the pseudocyst,
NOTE Confidence: 0.97798055
00:12:25.625 --> 00:12:27.465 the inflammatory cysts. In the
NOTE Confidence: 0.97798055
00:12:27.465 --> 00:12:28.745 middle section, you see the
NOTE Confidence: 0.97798055
00:12:28.745 --> 00:12:31.065 neoplastic cysts, which could be
NOTE Confidence: 0.97798055
00:12:31.065 --> 00:12:31.565 serous.
NOTE Confidence: 0.91076624
00:12:32.779 --> 00:12:33.600 These have
NOTE Confidence: 0.7464879
00:12:34.140 --> 00:12:35.440 no, molecular potential,
NOTE Confidence: 0.9881659
00:12:36.300 --> 00:12:38.000 as in serocyst adenoma
NOTE Confidence: 0.8923376
00:12:38.779 --> 00:12:39.839 or the mucinous,
NOTE Confidence: 0.97083586
00:12:40.540 --> 00:12:42.320 cyst, which are the IPMN
NOTE Confidence: 0.97083586
00:12:42.459 --> 00:12:44.320 and then MCN, the mucinous
NOTE Confidence: 0.9980023
00:12:44.684 --> 00:12:45.585 cystic neoplasm.
NOTE Confidence: 0.9993919
00:12:46.365 --> 00:12:48.145 So from left to right,
NOTE Confidence: 0.99767226
00:12:49.565 --> 00:12:51.645 the malignant risk increases. And
NOTE Confidence: 0.99767226

00:12:51.645 --> 00:12:53.025 on the very right side,
NOTE Confidence: 0.9399454

00:12:53.405 --> 00:12:55.325 we have obviously the ductal
NOTE Confidence: 0.9399454

00:12:55.325 --> 00:12:55.825 adenocarcinoma
NOTE Confidence: 0.9817317

00:12:56.684 --> 00:12:57.825 and maybe a neuroendocrine
NOTE Confidence: 0.9644999

00:12:58.285 --> 00:12:58.785 tumor.
NOTE Confidence: 0.97585535

00:12:59.165 --> 00:12:59.565 So,
NOTE Confidence: 0.9958827

00:13:00.500 --> 00:13:02.200 again, the risk of malignancy
NOTE Confidence: 0.9958827

00:13:02.260 --> 00:13:03.240 here is higher.
NOTE Confidence: 0.960669

00:13:05.860 --> 00:13:07.940 Again, a pictogram to show
NOTE Confidence: 0.960669

00:13:07.940 --> 00:13:08.980 that when we are dealing
NOTE Confidence: 0.960669

00:13:08.980 --> 00:13:10.339 with a pancreatic cyst, we
NOTE Confidence: 0.960669

00:13:10.339 --> 00:13:11.860 wanna think first of what
NOTE Confidence: 0.960669

00:13:11.860 --> 00:13:13.220 type of pancreatic cyst we're
NOTE Confidence: 0.960669

00:13:13.220 --> 00:13:14.120 dealing with.
NOTE Confidence: 0.903504

00:13:14.735 --> 00:13:16.355 What is the risk? Malignant,
NOTE Confidence: 0.903504

00:13:16.654 --> 00:13:18.495 no malignant risk, or maybe

NOTE Confidence: 0.903504
00:13:18.495 --> 00:13:18.995 cancers.
NOTE Confidence: 0.9244732
00:13:20.015 --> 00:13:21.535 And what is the strategy
NOTE Confidence: 0.9244732
00:13:21.535 --> 00:13:22.894 we're going to employ to
NOTE Confidence: 0.9244732
00:13:22.894 --> 00:13:23.955 manage this cyst?
NOTE Confidence: 0.97177917
00:13:24.975 --> 00:13:26.255 Again, on the left side,
NOTE Confidence: 0.97177917
00:13:26.255 --> 00:13:27.795 we have the the benign
NOTE Confidence: 0.97177917
00:13:27.855 --> 00:13:29.154 cyst, the pseudocyst,
NOTE Confidence: 0.9382918
00:13:29.455 --> 00:13:31.250 the sero cyst. These carry
NOTE Confidence: 0.9382918
00:13:31.250 --> 00:13:32.550 no malignant potential.
NOTE Confidence: 0.97371244
00:13:33.649 --> 00:13:35.110 And then in the middle,
NOTE Confidence: 0.97371244
00:13:35.170 --> 00:13:36.689 we have the IPMN and
NOTE Confidence: 0.97371244
00:13:36.689 --> 00:13:38.689 the mucinous cystic neoplasm. These
NOTE Confidence: 0.97371244
00:13:38.689 --> 00:13:40.290 are mucinous cysts. Again, they
NOTE Confidence: 0.97371244
00:13:40.290 --> 00:13:41.329 are the bulk of cysts
NOTE Confidence: 0.97371244
00:13:41.329 --> 00:13:41.990 that eventually,
NOTE Confidence: 0.985758

00:13:42.769 --> 00:13:44.629 could lead to malignant transformation.

NOTE Confidence: 0.9819529

00:13:45.395 --> 00:13:46.355 And then on the right,

NOTE Confidence: 0.9819529

00:13:46.355 --> 00:13:47.975 the pancreatic cancer, the malignant

NOTE Confidence: 0.9819529

00:13:48.035 --> 00:13:48.535 lesions.

NOTE Confidence: 0.99723595

00:13:48.995 --> 00:13:49.975 So the strategy

NOTE Confidence: 0.98734146

00:13:50.755 --> 00:13:51.955 depends on the type of

NOTE Confidence: 0.98734146

00:13:51.955 --> 00:13:52.455 cyst,

NOTE Confidence: 0.940252

00:13:52.995 --> 00:13:54.675 and obviously could run from

NOTE Confidence: 0.940252

00:13:54.675 --> 00:13:56.275 no surveillance needed for the

NOTE Confidence: 0.940252

00:13:56.275 --> 00:13:57.655 benign cysts to

NOTE Confidence: 0.9993242

00:13:58.115 --> 00:13:58.615 surveillance

NOTE Confidence: 0.8858729

00:13:59.160 --> 00:14:00.920 and surgery, a combination of

NOTE Confidence: 0.8858729

00:14:00.920 --> 00:14:02.920 those in the mid category,

NOTE Confidence: 0.8858729

00:14:02.920 --> 00:14:04.139 the mucinous cysts,

NOTE Confidence: 0.9471203

00:14:04.440 --> 00:14:06.040 and obviously surgery when we're

NOTE Confidence: 0.9471203

00:14:06.040 --> 00:14:07.820 dealing with a pancreatic tumor.

NOTE Confidence: 0.9469482

00:14:10.600 --> 00:14:11.639 What are the common types

NOTE Confidence: 0.9469482

00:14:11.639 --> 00:14:13.100 of pancreatic cyst and characteristics?

NOTE Confidence: 0.97652763

00:14:13.485 --> 00:14:15.404 Again, there are about more

NOTE Confidence: 0.97652763

00:14:15.404 --> 00:14:17.485 than twenty epithelial and non

NOTE Confidence: 0.97652763

00:14:17.485 --> 00:14:19.265 epithelial pancreatic cysts.

NOTE Confidence: 0.9972526

00:14:19.964 --> 00:14:20.464 However,

NOTE Confidence: 0.9993906

00:14:21.085 --> 00:14:21.825 the majority

NOTE Confidence: 0.9625432

00:14:22.205 --> 00:14:24.305 belong to the six, histologic

NOTE Confidence: 0.9625432

00:14:24.525 --> 00:14:26.045 categories that you see here

NOTE Confidence: 0.9625432

00:14:26.045 --> 00:14:27.105 on this slide.

NOTE Confidence: 0.9433145

00:14:27.620 --> 00:14:28.600 And I'm gonna slice it

NOTE Confidence: 0.9433145

00:14:28.600 --> 00:14:30.019 for you so you take

NOTE Confidence: 0.9433145

00:14:30.019 --> 00:14:31.000 away actually

NOTE Confidence: 0.963073

00:14:31.459 --> 00:14:33.300 the message. The top two

NOTE Confidence: 0.963073

00:14:33.300 --> 00:14:35.540 are benign. So they carry

NOTE Confidence: 0.963073

00:14:35.540 --> 00:14:37.620 no malignant potential, zero, as
NOTE Confidence: 0.963073

00:14:37.620 --> 00:14:38.339 you can see on the
NOTE Confidence: 0.963073

00:14:38.339 --> 00:14:40.180 right hand side. And these
NOTE Confidence: 0.963073

00:14:40.180 --> 00:14:41.779 are the pseudocysts and the
NOTE Confidence: 0.963073

00:14:41.779 --> 00:14:43.000 serocyst adenoma.
NOTE Confidence: 0.973103

00:14:44.935 --> 00:14:46.635 Pseudocysts are usually
NOTE Confidence: 0.7237345

00:14:47.015 --> 00:14:47.515 diagnosed
NOTE Confidence: 0.8819264

00:14:48.455 --> 00:14:49.675 in the setting of
NOTE Confidence: 0.9606665

00:14:50.615 --> 00:14:52.775 pancreatitis. So people patients have
NOTE Confidence: 0.9606665

00:14:52.775 --> 00:14:53.735 to have a history of
NOTE Confidence: 0.9606665

00:14:53.735 --> 00:14:54.235 pancreatitis.
NOTE Confidence: 0.9278179

00:14:55.735 --> 00:14:57.735 And the diagnosis of pseudocyst
NOTE Confidence: 0.9278179

00:14:57.735 --> 00:14:59.250 in the absence of history
NOTE Confidence: 0.9278179

00:14:59.250 --> 00:15:00.850 of pancreatitis should be made
NOTE Confidence: 0.9278179

00:15:00.850 --> 00:15:01.670 very carefully,
NOTE Confidence: 0.99593824

00:15:02.930 --> 00:15:04.130 since you might be dealing

NOTE Confidence: 0.99593824
00:15:04.130 --> 00:15:05.009 with a different type of
NOTE Confidence: 0.99593824
00:15:05.009 --> 00:15:05.509 cyst.
NOTE Confidence: 0.9822991
00:15:06.610 --> 00:15:07.009 The,
NOTE Confidence: 0.9290823
00:15:07.570 --> 00:15:08.630 serocyst adenoma,
NOTE Confidence: 0.97700566
00:15:09.089 --> 00:15:10.550 predominantly in women,
NOTE Confidence: 0.9570439
00:15:10.930 --> 00:15:12.464 occurs in fifth through the
NOTE Confidence: 0.9570439
00:15:12.464 --> 00:15:13.825 seventh decade of life. They
NOTE Confidence: 0.9570439
00:15:13.825 --> 00:15:15.745 are mostly asymptomatic. Again, they
NOTE Confidence: 0.9570439
00:15:15.745 --> 00:15:17.605 carry no malignant potential.
NOTE Confidence: 0.9758704
00:15:18.705 --> 00:15:21.105 And they have a typical
NOTE Confidence: 0.9758704
00:15:21.105 --> 00:15:22.645 presentation when they are classic.
NOTE Confidence: 0.9758704
00:15:22.865 --> 00:15:24.145 The challenge occurs when they
NOTE Confidence: 0.9758704
00:15:24.145 --> 00:15:25.585 are non classic looking on
NOTE Confidence: 0.9758704
00:15:25.585 --> 00:15:27.320 the imaging. So the classic
NOTE Confidence: 0.9758704
00:15:27.460 --> 00:15:28.820 is sort of, with a
NOTE Confidence: 0.9758704

00:15:28.820 --> 00:15:29.720 central calcification,
NOTE Confidence: 0.98010194

00:15:31.060 --> 00:15:31.800 and they,
NOTE Confidence: 0.91132766

00:15:32.180 --> 00:15:33.380 have no communication with the
NOTE Confidence: 0.91132766

00:15:33.380 --> 00:15:34.980 pan pancreatic duct. They occur
NOTE Confidence: 0.91132766

00:15:34.980 --> 00:15:35.720 in the body.
NOTE Confidence: 0.94068587

00:15:36.340 --> 00:15:38.260 Pseudocyst, as you see, first
NOTE Confidence: 0.94068587

00:15:38.260 --> 00:15:39.940 category are mostly in the
NOTE Confidence: 0.94068587

00:15:39.940 --> 00:15:41.220 tail, in the, left side
NOTE Confidence: 0.94068587

00:15:41.220 --> 00:15:42.404 of the the pancreas.
NOTE Confidence: 0.9453513

00:15:43.505 --> 00:15:44.865 Then we have the middle
NOTE Confidence: 0.9453513

00:15:44.865 --> 00:15:46.305 category, the next two, the
NOTE Confidence: 0.9453513

00:15:46.305 --> 00:15:48.225 IPMN and the MCN or
NOTE Confidence: 0.9453513

00:15:48.225 --> 00:15:48.725 mucinous
NOTE Confidence: 0.9983021

00:15:49.665 --> 00:15:50.725 cystic neoplasm.
NOTE Confidence: 0.9602367

00:15:51.505 --> 00:15:53.045 So these two are mucinous
NOTE Confidence: 0.9602367

00:15:53.105 --> 00:15:54.645 cysts. They're the most prevalent.

NOTE Confidence: 0.80473864
00:15:56.190 --> 00:15:56.630 And,
NOTE Confidence: 0.9761268
00:15:57.070 --> 00:15:58.290 starting with the IPMN,
NOTE Confidence: 0.9107907
00:15:59.310 --> 00:16:01.230 these are with, equal sex
NOTE Confidence: 0.9107907
00:16:01.230 --> 00:16:01.730 distribution.
NOTE Confidence: 0.9439438
00:16:02.430 --> 00:16:03.949 They occur, in the fifth
NOTE Confidence: 0.9439438
00:16:03.949 --> 00:16:05.310 through the seventh decades of
NOTE Confidence: 0.9439438
00:16:05.310 --> 00:16:05.810 life.
NOTE Confidence: 0.94884783
00:16:06.990 --> 00:16:08.850 They may cause pancreatitis.
NOTE Confidence: 0.9096724
00:16:09.310 --> 00:16:11.525 So, clinical pearl when a
NOTE Confidence: 0.9096724
00:16:11.525 --> 00:16:13.205 patient presents with acute acute
NOTE Confidence: 0.9096724
00:16:13.205 --> 00:16:13.705 pancreatitis,
NOTE Confidence: 0.9777732
00:16:14.965 --> 00:16:16.725 and we identify a cyst,
NOTE Confidence: 0.9777732
00:16:16.725 --> 00:16:18.345 doesn't mean that's a pseudocyst.
NOTE Confidence: 0.9777732
00:16:18.565 --> 00:16:19.845 It could be simply the
NOTE Confidence: 0.9777732
00:16:19.845 --> 00:16:21.225 cyst causing the pancreatitis.
NOTE Confidence: 0.99606776

00:16:22.245 --> 00:16:22.985 The IPMNs
NOTE Confidence: 0.8785482

00:16:23.525 --> 00:16:25.845 are of, few types. The
NOTE Confidence: 0.8785482

00:16:25.845 --> 00:16:26.345 main
NOTE Confidence: 0.9625876

00:16:26.680 --> 00:16:27.180 IPMN,
NOTE Confidence: 0.95107204

00:16:27.960 --> 00:16:30.060 which carries a higher malignant
NOTE Confidence: 0.95107204

00:16:30.200 --> 00:16:30.700 potential,
NOTE Confidence: 0.9668786

00:16:31.160 --> 00:16:32.780 and the branch duct IPMN.
NOTE Confidence: 0.9764222

00:16:33.240 --> 00:16:34.680 And there's also a mixed
NOTE Confidence: 0.9764222

00:16:34.680 --> 00:16:35.960 type that involves the main
NOTE Confidence: 0.9764222

00:16:35.960 --> 00:16:37.260 duct and the branch duct.
NOTE Confidence: 0.99898845

00:16:37.960 --> 00:16:38.460 So
NOTE Confidence: 0.9789411

00:16:38.805 --> 00:16:40.345 with the main duct IPMN,
NOTE Confidence: 0.97818786

00:16:41.525 --> 00:16:42.805 they cause dilation of the
NOTE Confidence: 0.97818786

00:16:42.805 --> 00:16:44.105 main pancreatic duct
NOTE Confidence: 0.8524421

00:16:44.565 --> 00:16:45.785 and they have a hallmark,
NOTE Confidence: 0.90931904

00:16:46.805 --> 00:16:48.165 when, when this is present,

NOTE Confidence: 0.90931904

00:16:48.165 --> 00:16:49.305 the fish mouth papilla.

NOTE Confidence: 0.96624124

00:16:49.845 --> 00:16:50.885 So when you look at

NOTE Confidence: 0.96624124

00:16:50.885 --> 00:16:51.845 the opening of the main

NOTE Confidence: 0.96624124

00:16:51.845 --> 00:16:52.965 pancreatic duct in the small

NOTE Confidence: 0.96624124

00:16:52.965 --> 00:16:54.769 intestine, you would see just

NOTE Confidence: 0.96624124

00:16:54.769 --> 00:16:55.730 as in in the photo

NOTE Confidence: 0.96624124

00:16:55.730 --> 00:16:56.550 to the right,

NOTE Confidence: 0.829262

00:16:56.930 --> 00:16:57.970 you will see this fish

NOTE Confidence: 0.829262

00:16:57.970 --> 00:17:00.050 mouth papillae with, expression of

NOTE Confidence: 0.829262

00:17:00.050 --> 00:17:01.750 mucin since they're mucin productive.

NOTE Confidence: 0.98205227

00:17:03.170 --> 00:17:03.910 The mucinous

NOTE Confidence: 0.9963882

00:17:04.290 --> 00:17:05.270 cystic neoplasm

NOTE Confidence: 0.9114398

00:17:05.650 --> 00:17:06.770 of the second one in

NOTE Confidence: 0.9114398

00:17:06.770 --> 00:17:08.165 the mucinous category,

NOTE Confidence: 0.99558336

00:17:09.025 --> 00:17:10.165 tends to involve

NOTE Confidence: 0.99084556

00:17:10.465 --> 00:17:11.045 the tail.
NOTE Confidence: 0.99612933

00:17:12.545 --> 00:17:13.445 It could be
NOTE Confidence: 0.9177849

00:17:16.225 --> 00:17:18.305 it carries a malignant potential,
NOTE Confidence: 0.9177849

00:17:18.305 --> 00:17:18.805 certainly,
NOTE Confidence: 0.9806384

00:17:19.345 --> 00:17:20.790 but they are less common
NOTE Confidence: 0.9806384

00:17:20.790 --> 00:17:22.390 than IPMN. So I wanna
NOTE Confidence: 0.9806384

00:17:22.390 --> 00:17:23.590 highlight this early on so
NOTE Confidence: 0.9806384

00:17:23.590 --> 00:17:24.730 you understand that,
NOTE Confidence: 0.8727169

00:17:25.590 --> 00:17:26.090 IPMN
NOTE Confidence: 0.85205966

00:17:26.470 --> 00:17:27.450 is the battlefield.
NOTE Confidence: 0.9675252

00:17:27.830 --> 00:17:28.790 That's where most of the
NOTE Confidence: 0.9675252

00:17:28.790 --> 00:17:29.990 hedging and most of the
NOTE Confidence: 0.9675252

00:17:29.990 --> 00:17:31.430 debate goes on in terms
NOTE Confidence: 0.9675252

00:17:31.430 --> 00:17:32.970 of how to manage them,
NOTE Confidence: 0.9675252

00:17:33.030 --> 00:17:34.185 how to work them up,
NOTE Confidence: 0.9675252

00:17:34.265 --> 00:17:36.825 and certainly surveillance to eventually

NOTE Confidence: 0.9675252

00:17:36.825 --> 00:17:39.225 prevent cancer or intervene actually

NOTE Confidence: 0.9675252

00:17:39.225 --> 00:17:40.745 when they develop high risk

NOTE Confidence: 0.9675252

00:17:40.745 --> 00:17:42.025 features, intervene at the right

NOTE Confidence: 0.9675252

00:17:42.025 --> 00:17:43.245 time to for curative,

NOTE Confidence: 0.92826825

00:17:44.665 --> 00:17:45.965 intent with surgical,

NOTE Confidence: 0.99395156

00:17:46.585 --> 00:17:47.085 approach.

NOTE Confidence: 0.95679015

00:17:47.890 --> 00:17:48.710 So the mucinous

NOTE Confidence: 0.99222326

00:17:49.090 --> 00:17:50.070 cystic neoplasms,

NOTE Confidence: 0.908601

00:17:51.090 --> 00:17:53.270 almost exclusively occurred in women,

NOTE Confidence: 0.908601

00:17:53.410 --> 00:17:54.390 and they,

NOTE Confidence: 0.8984931

00:17:54.929 --> 00:17:56.130 occur a little earlier in

NOTE Confidence: 0.8984931

00:17:56.130 --> 00:17:57.090 the fourth through the sixth

NOTE Confidence: 0.8984931

00:17:57.250 --> 00:17:58.549 sixth decade of life.

NOTE Confidence: 0.94176227

00:17:59.010 --> 00:18:00.230 They're mostly asymptomatic.

NOTE Confidence: 0.8873653

00:18:01.165 --> 00:18:02.685 And, sometimes they have this

NOTE Confidence: 0.8873653

00:18:02.685 --> 00:18:03.585 actual calcifications,
NOTE Confidence: 0.9284763

00:18:03.885 --> 00:18:05.265 but not all the time.
NOTE Confidence: 0.9284763

00:18:05.325 --> 00:18:07.025 About one out of four
NOTE Confidence: 0.9284763

00:18:07.165 --> 00:18:08.365 of the cyst will have
NOTE Confidence: 0.9284763

00:18:08.365 --> 00:18:08.865 that.
NOTE Confidence: 0.99228996

00:18:09.645 --> 00:18:10.145 And
NOTE Confidence: 0.5694393

00:18:11.965 --> 00:18:12.465 they
NOTE Confidence: 0.9975477

00:18:12.765 --> 00:18:13.265 are
NOTE Confidence: 0.83783203

00:18:15.270 --> 00:18:17.050 showing ovarian like stroma.
NOTE Confidence: 0.87263644

00:18:17.590 --> 00:18:18.790 So they tend to be
NOTE Confidence: 0.87263644

00:18:18.790 --> 00:18:19.370 a unilateral,
NOTE Confidence: 0.99892455

00:18:19.990 --> 00:18:21.270 and they have a specific
NOTE Confidence: 0.99892455

00:18:21.270 --> 00:18:21.770 presentation.
NOTE Confidence: 0.97939914

00:18:23.430 --> 00:18:25.050 So the last two cysts
NOTE Confidence: 0.97939914

00:18:25.110 --> 00:18:26.230 are less common, and I'm
NOTE Confidence: 0.97939914

00:18:26.230 --> 00:18:27.285 not gonna go through them.

NOTE Confidence: 0.97939914
00:18:27.365 --> 00:18:28.725 So we'll move on for
NOTE Confidence: 0.97939914
00:18:28.725 --> 00:18:29.625 the sake of,
NOTE Confidence: 0.9619721
00:18:30.165 --> 00:18:31.545 interesting cases we have,
NOTE Confidence: 0.9935336
00:18:32.565 --> 00:18:34.165 next. I'll turn it to
NOTE Confidence: 0.9935336
00:18:34.165 --> 00:18:34.665 James.
NOTE Confidence: 0.8084071
00:18:35.285 --> 00:18:35.785 Right.
NOTE Confidence: 0.9393727
00:18:36.085 --> 00:18:37.525 Thanks, Laura, for for a
NOTE Confidence: 0.9393727
00:18:37.525 --> 00:18:39.045 great overview of these pancreatic
NOTE Confidence: 0.9393727
00:18:39.045 --> 00:18:40.165 cysts, and thanks, Dan and
NOTE Confidence: 0.9393727
00:18:40.165 --> 00:18:42.289 Karen, for the organizing this.
NOTE Confidence: 0.9963111
00:18:42.830 --> 00:18:43.309 So,
NOTE Confidence: 0.9586593
00:18:43.710 --> 00:18:44.909 for the next phase, I
NOTE Confidence: 0.9586593
00:18:44.909 --> 00:18:46.269 just we just wanna focus
NOTE Confidence: 0.9586593
00:18:46.269 --> 00:18:47.549 on how we approach these
NOTE Confidence: 0.9586593
00:18:47.549 --> 00:18:48.909 pancreatic cysts. And as kind
NOTE Confidence: 0.9586593

00:18:48.909 --> 00:18:50.509 of Flora rightly pointed out,
NOTE Confidence: 0.9586593

00:18:50.509 --> 00:18:51.549 yes, there's a very long
NOTE Confidence: 0.9586593

00:18:51.549 --> 00:18:53.275 list of pancreatic cysts, but
NOTE Confidence: 0.9586593

00:18:53.275 --> 00:18:54.635 really where the battlefield is
NOTE Confidence: 0.9586593

00:18:54.635 --> 00:18:55.855 is is in these IPMNs.
NOTE Confidence: 0.9586593

00:18:55.915 --> 00:18:57.115 And the vast majority of
NOTE Confidence: 0.9586593

00:18:57.115 --> 00:18:58.554 cysts that we're dealing with
NOTE Confidence: 0.9586593

00:18:58.554 --> 00:18:59.835 are likely gonna turn out
NOTE Confidence: 0.9586593

00:18:59.835 --> 00:19:01.035 to be some form of
NOTE Confidence: 0.9586593

00:19:01.035 --> 00:19:02.395 an IPMN and likely some
NOTE Confidence: 0.9586593

00:19:02.395 --> 00:19:03.115 form of what's called a
NOTE Confidence: 0.9586593

00:19:03.115 --> 00:19:04.475 branch type IPMN. So we're
NOTE Confidence: 0.9586593

00:19:04.475 --> 00:19:06.015 gonna use these terms interchangeably
NOTE Confidence: 0.9586593

00:19:06.155 --> 00:19:06.955 when we talk about the
NOTE Confidence: 0.9586593

00:19:06.955 --> 00:19:08.369 cases and kinda going forward.
NOTE Confidence: 0.9586593

00:19:08.450 --> 00:19:09.570 That's really what the focus

NOTE Confidence: 0.9586593
00:19:09.570 --> 00:19:11.010 is on. Not ignoring making
NOTE Confidence: 0.9586593
00:19:11.010 --> 00:19:12.690 a diagnosis, serious diagnosis, and
NOTE Confidence: 0.9586593
00:19:12.690 --> 00:19:13.890 so on, but really just
NOTE Confidence: 0.9586593
00:19:13.890 --> 00:19:15.010 trying to focus on this
NOTE Confidence: 0.9586593
00:19:15.010 --> 00:19:15.910 particular area.
NOTE Confidence: 0.9351912
00:19:16.290 --> 00:19:17.490 So when we approach these
NOTE Confidence: 0.9351912
00:19:17.490 --> 00:19:18.690 page patients and try to
NOTE Confidence: 0.9351912
00:19:18.690 --> 00:19:19.410 figure out what do we
NOTE Confidence: 0.9351912
00:19:19.410 --> 00:19:20.130 do, and a lot of
NOTE Confidence: 0.9351912
00:19:20.130 --> 00:19:21.170 these patients are picked up
NOTE Confidence: 0.9351912
00:19:21.170 --> 00:19:22.850 incidentally for on scans done
NOTE Confidence: 0.9351912
00:19:22.850 --> 00:19:24.234 for other reasons, You know
NOTE Confidence: 0.9351912
00:19:24.234 --> 00:19:25.434 before we figure out are
NOTE Confidence: 0.9351912
00:19:25.434 --> 00:19:26.975 we going to do nothing,
NOTE Confidence: 0.9351912
00:19:27.274 --> 00:19:29.115 follow them or or send
NOTE Confidence: 0.9351912

00:19:29.115 --> 00:19:30.475 them for surgery, we have
NOTE Confidence: 0.9351912

00:19:30.475 --> 00:19:31.115 to kind of make an
NOTE Confidence: 0.9351912

00:19:31.115 --> 00:19:32.715 overall assessment of the patient's
NOTE Confidence: 0.9351912

00:19:32.715 --> 00:19:33.215 condition,
NOTE Confidence: 0.9539916

00:19:33.595 --> 00:19:34.955 competing health risks and so
NOTE Confidence: 0.9539916

00:19:34.955 --> 00:19:36.234 on. And then also look
NOTE Confidence: 0.9539916

00:19:36.234 --> 00:19:37.994 at some other pancreatic cancer
NOTE Confidence: 0.9539916

00:19:37.994 --> 00:19:39.320 risk factors like family history
NOTE Confidence: 0.9539916

00:19:39.320 --> 00:19:40.600 of pancreatic cancer. Does a
NOTE Confidence: 0.9539916

00:19:40.600 --> 00:19:41.960 patient have a germline mutation
NOTE Confidence: 0.9539916

00:19:41.960 --> 00:19:42.920 that would increase the risk
NOTE Confidence: 0.9539916

00:19:42.920 --> 00:19:44.359 of pancreatic cancer? And then
NOTE Confidence: 0.9539916

00:19:44.359 --> 00:19:45.400 it gets into the issue
NOTE Confidence: 0.9539916

00:19:45.400 --> 00:19:46.060 of making,
NOTE Confidence: 0.88115835

00:19:46.920 --> 00:19:48.119 a a a decision and
NOTE Confidence: 0.88115835

00:19:48.119 --> 00:19:49.660 a shared decision making process

NOTE Confidence: 0.37782302
00:19:50.040 --> 00:19:50.540 process
NOTE Confidence: 0.97446686
00:19:51.320 --> 00:19:52.680 with the patient while we
NOTE Confidence: 0.97446686
00:19:52.680 --> 00:19:53.565 assess the risk.
NOTE Confidence: 0.9951657
00:19:53.965 --> 00:19:54.845 And the way we approach
NOTE Confidence: 0.9951657
00:19:54.845 --> 00:19:55.984 this is really trying
NOTE Confidence: 0.9178134
00:20:00.845 --> 00:20:01.345 IPMNs
NOTE Confidence: 0.9740967
00:20:01.725 --> 00:20:03.244 into three broad categories. We
NOTE Confidence: 0.9740967
00:20:03.244 --> 00:20:05.345 talk about high risk pancreatic
NOTE Confidence: 0.9740967
00:20:05.404 --> 00:20:07.664 cyst or IPMNs, intermediate risk,
NOTE Confidence: 0.9974549
00:20:08.044 --> 00:20:09.024 or low risk.
NOTE Confidence: 0.9383797
00:20:10.619 --> 00:20:11.340 So we'll move to the
NOTE Confidence: 0.9383797
00:20:11.340 --> 00:20:12.619 next one. So with respect
NOTE Confidence: 0.9383797
00:20:12.619 --> 00:20:14.480 to the high risk IPMNs,
NOTE Confidence: 0.9413908
00:20:15.100 --> 00:20:16.780 these are patients that have
NOTE Confidence: 0.9413908
00:20:16.780 --> 00:20:17.980 cysts but in addition they
NOTE Confidence: 0.9413908

00:20:17.980 --> 00:20:19.900 have imaging features such as
NOTE Confidence: 0.9413908

00:20:19.900 --> 00:20:21.760 a very dilated vein pancreatic
NOTE Confidence: 0.9413908

00:20:21.900 --> 00:20:23.174 duct at the presence of
NOTE Confidence: 0.9413908

00:20:23.174 --> 00:20:24.215 a solid mass which would
NOTE Confidence: 0.9413908

00:20:24.215 --> 00:20:25.654 be very concerning for that
NOTE Confidence: 0.9413908

00:20:25.654 --> 00:20:26.695 this cyst has turned into
NOTE Confidence: 0.9413908

00:20:26.695 --> 00:20:27.355 a malignancy
NOTE Confidence: 0.95614713

00:20:28.054 --> 00:20:29.335 and even biliary obstruction. And
NOTE Confidence: 0.95614713

00:20:29.335 --> 00:20:30.615 when we see these cysts
NOTE Confidence: 0.95614713

00:20:30.615 --> 00:20:31.734 you know we're concerned we're
NOTE Confidence: 0.95614713

00:20:31.734 --> 00:20:33.335 concerned that there's something significant
NOTE Confidence: 0.95614713

00:20:33.335 --> 00:20:35.080 and serious going on And
NOTE Confidence: 0.95614713

00:20:35.080 --> 00:20:35.720 these are the sorts of
NOTE Confidence: 0.95614713

00:20:35.720 --> 00:20:36.520 patients that we would think
NOTE Confidence: 0.95614713

00:20:36.520 --> 00:20:38.040 about sending to surgery or
NOTE Confidence: 0.95614713

00:20:38.040 --> 00:20:38.920 at least for a surgical

NOTE Confidence: 0.95614713
00:20:38.920 --> 00:20:39.420 evaluation.
NOTE Confidence: 0.93865436
00:20:40.200 --> 00:20:41.000 For the next group of
NOTE Confidence: 0.93865436
00:20:41.000 --> 00:20:42.220 cysts, the next slide,
NOTE Confidence: 0.9230251
00:20:42.680 --> 00:20:43.820 these are the intermediate,
NOTE Confidence: 0.7898044
00:20:44.280 --> 00:20:45.500 risk IPMNs.
NOTE Confidence: 0.93277127
00:20:47.505 --> 00:20:48.785 And this is kind of
NOTE Confidence: 0.93277127
00:20:48.785 --> 00:20:50.305 the intermediate group and these
NOTE Confidence: 0.93277127
00:20:50.305 --> 00:20:52.085 patients have features on imaging
NOTE Confidence: 0.93277127
00:20:52.145 --> 00:20:52.945 that are a little bit
NOTE Confidence: 0.93277127
00:20:52.945 --> 00:20:54.865 worrisome to us. They include
NOTE Confidence: 0.93277127
00:20:54.865 --> 00:20:55.744 things like well the duct
NOTE Confidence: 0.93277127
00:20:55.744 --> 00:20:56.865 is a little bit dilated
NOTE Confidence: 0.93277127
00:20:56.865 --> 00:20:58.465 not very dilated or there's
NOTE Confidence: 0.93277127
00:20:58.465 --> 00:20:59.585 a change in calibre of
NOTE Confidence: 0.93277127
00:20:59.585 --> 00:21:00.865 the main pancreatic duct for
NOTE Confidence: 0.93277127

00:21:00.865 --> 00:21:01.365 example
NOTE Confidence: 0.9443206

00:21:01.669 --> 00:21:02.630 or the cyst size is
NOTE Confidence: 0.9443206

00:21:02.630 --> 00:21:04.070 actually greater than three centimeters
NOTE Confidence: 0.9443206

00:21:04.070 --> 00:21:05.109 which would strike most people
NOTE Confidence: 0.9443206

00:21:05.109 --> 00:21:06.070 as big but it's a
NOTE Confidence: 0.9443206

00:21:06.070 --> 00:21:07.049 worrisome feature.
NOTE Confidence: 0.9504449

00:21:07.350 --> 00:21:08.630 Maybe there's a small nodule
NOTE Confidence: 0.9504449

00:21:08.630 --> 00:21:09.369 in the cyst,
NOTE Confidence: 0.914685

00:21:09.909 --> 00:21:11.190 maybe there's some lymph nodes
NOTE Confidence: 0.914685

00:21:11.190 --> 00:21:12.230 or maybe the cyst has
NOTE Confidence: 0.914685

00:21:12.230 --> 00:21:14.205 gotten bigger over time or
NOTE Confidence: 0.914685

00:21:14.205 --> 00:21:15.244 maybe over a year it's
NOTE Confidence: 0.914685

00:21:15.244 --> 00:21:16.765 increased in size by greater
NOTE Confidence: 0.914685

00:21:16.765 --> 00:21:18.225 than twenty percent or so.
NOTE Confidence: 0.914685

00:21:18.285 --> 00:21:19.164 And these are patients that
NOTE Confidence: 0.914685

00:21:19.164 --> 00:21:21.105 we classify as having intermediate

NOTE Confidence: 0.914685
00:21:21.244 --> 00:21:21.984 risk factors.
NOTE Confidence: 0.53808385
00:21:22.605 --> 00:21:23.184 So for
NOTE Confidence: 0.9189426
00:21:24.365 --> 00:21:26.065 these intermediate risk factors
NOTE Confidence: 0.91592664
00:21:26.560 --> 00:21:27.600 what we end up doing
NOTE Confidence: 0.91592664
00:21:27.600 --> 00:21:29.280 is evaluating them further. And
NOTE Confidence: 0.91592664
00:21:29.280 --> 00:21:30.400 typically these are the types
NOTE Confidence: 0.91592664
00:21:30.400 --> 00:21:31.760 of patients that would undergo
NOTE Confidence: 0.91592664
00:21:31.760 --> 00:21:33.760 an endoscopic ultrasound. Really to
NOTE Confidence: 0.91592664
00:21:33.760 --> 00:21:35.119 kind of parse out if
NOTE Confidence: 0.91592664
00:21:35.119 --> 00:21:36.480 there's something more serious going
NOTE Confidence: 0.91592664
00:21:36.480 --> 00:21:37.520 on. And I won't get
NOTE Confidence: 0.91592664
00:21:37.520 --> 00:21:38.480 into too much detail about
NOTE Confidence: 0.91592664
00:21:38.480 --> 00:21:39.920 the endoscopic ultrasound, but as
NOTE Confidence: 0.91592664
00:21:39.920 --> 00:21:40.994 most of you know, it's
NOTE Confidence: 0.91592664
00:21:40.994 --> 00:21:42.234 a type of endoscopy where
NOTE Confidence: 0.91592664

00:21:42.234 --> 00:21:43.115 the camera is passed down.
NOTE Confidence: 0.91592664

00:21:43.115 --> 00:21:44.395 We get very good views
NOTE Confidence: 0.91592664

00:21:44.395 --> 00:21:45.855 of the pancreas throughout,
NOTE Confidence: 0.97939014

00:21:46.234 --> 00:21:47.375 throughout its stages.
NOTE Confidence: 0.98989624

00:21:47.755 --> 00:21:48.815 And one of its
NOTE Confidence: 0.9670367

00:21:49.355 --> 00:21:51.055 great advantages is just visualization,
NOTE Confidence: 0.96667725

00:21:51.515 --> 00:21:52.635 but another advantage is the
NOTE Confidence: 0.96667725

00:21:52.635 --> 00:21:54.799 ability to biopsy these cysts.
NOTE Confidence: 0.96667725

00:21:54.859 --> 00:21:55.900 And when we biopsy these
NOTE Confidence: 0.96667725

00:21:55.900 --> 00:21:56.779 cysts, we're able to look
NOTE Confidence: 0.96667725

00:21:56.779 --> 00:21:57.740 at the cells that we
NOTE Confidence: 0.96667725

00:21:57.740 --> 00:21:58.619 get back from the cyst
NOTE Confidence: 0.96667725

00:21:58.619 --> 00:22:00.559 fluid, but also a variety
NOTE Confidence: 0.96667725

00:22:00.619 --> 00:22:01.119 of,
NOTE Confidence: 0.95475155

00:22:01.900 --> 00:22:04.140 markers, including DNA markers that
NOTE Confidence: 0.95475155

00:22:04.140 --> 00:22:05.440 have a very high specificity

NOTE Confidence: 0.95475155
00:22:05.580 --> 00:22:06.799 and sometimes sensitivity
NOTE Confidence: 0.9898289
00:22:07.195 --> 00:22:08.315 for not just making the
NOTE Confidence: 0.9898289
00:22:08.315 --> 00:22:09.755 diagnosis of it being a
NOTE Confidence: 0.9898289
00:22:09.755 --> 00:22:10.255 mucinous,
NOTE Confidence: 0.9743717
00:22:10.555 --> 00:22:11.755 but also maybe telling us
NOTE Confidence: 0.9743717
00:22:11.755 --> 00:22:12.875 that this is potentially a
NOTE Confidence: 0.9743717
00:22:12.875 --> 00:22:14.635 high grade dysplasia or even
NOTE Confidence: 0.9743717
00:22:14.635 --> 00:22:16.575 a cancer. So endoscopic ultrasound
NOTE Confidence: 0.9743717
00:22:16.635 --> 00:22:17.835 is very useful again for
NOTE Confidence: 0.9743717
00:22:17.835 --> 00:22:19.615 teasing out these, intermediate
NOTE Confidence: 0.9570261
00:22:19.915 --> 00:22:20.415 risk,
NOTE Confidence: 0.9971202
00:22:20.715 --> 00:22:21.775 pancreatic cysts.
NOTE Confidence: 0.93279994
00:22:22.270 --> 00:22:23.090 Next slide.
NOTE Confidence: 0.9054003
00:22:23.869 --> 00:22:24.990 But really kind of what
NOTE Confidence: 0.9054003
00:22:24.990 --> 00:22:26.030 the the again the main
NOTE Confidence: 0.9054003

00:22:26.030 --> 00:22:26.830 battle to get to get
NOTE Confidence: 0.9054003

00:22:26.830 --> 00:22:28.350 back to this issue is
NOTE Confidence: 0.9054003

00:22:28.350 --> 00:22:29.470 the other group. These are
NOTE Confidence: 0.9054003

00:22:29.470 --> 00:22:30.910 the low risk IPMN. So
NOTE Confidence: 0.9054003

00:22:30.910 --> 00:22:32.109 these are your cysts again
NOTE Confidence: 0.9054003

00:22:32.109 --> 00:22:33.650 presumed branch duct IPMNs
NOTE Confidence: 0.9389089

00:22:34.030 --> 00:22:34.990 that don't have a single
NOTE Confidence: 0.9389089

00:22:34.990 --> 00:22:36.190 worrisome feature. They don't have
NOTE Confidence: 0.9389089

00:22:36.190 --> 00:22:37.490 a single high risk feature.
NOTE Confidence: 0.9389089

00:22:37.744 --> 00:22:38.705 And these make up the
NOTE Confidence: 0.9389089

00:22:38.705 --> 00:22:40.225 vast vast majority of patients
NOTE Confidence: 0.9389089

00:22:40.225 --> 00:22:41.365 these are the five millimeter
NOTE Confidence: 0.9389089

00:22:41.425 --> 00:22:42.625 the ten millimeter cyst that
NOTE Confidence: 0.9389089

00:22:42.625 --> 00:22:44.465 you see on routine scans
NOTE Confidence: 0.9389089

00:22:44.465 --> 00:22:45.984 done for other reasons and
NOTE Confidence: 0.9389089

00:22:45.984 --> 00:22:47.345 yes they are presumed branch

NOTE Confidence: 0.9389089
00:22:47.345 --> 00:22:48.165 strict IPMNs
NOTE Confidence: 0.97013444
00:22:48.545 --> 00:22:49.345 but you can see from
NOTE Confidence: 0.97013444
00:22:49.345 --> 00:22:50.145 this data that if you
NOTE Confidence: 0.97013444
00:22:50.145 --> 00:22:51.345 were to follow this group
NOTE Confidence: 0.97013444
00:22:51.345 --> 00:22:52.945 of patients for long periods
NOTE Confidence: 0.97013444
00:22:52.945 --> 00:22:53.640 of time or up to
NOTE Confidence: 0.97013444
00:22:53.640 --> 00:22:54.380 five years,
NOTE Confidence: 0.9623879
00:22:54.680 --> 00:22:55.640 yes, the cyst some of
NOTE Confidence: 0.9623879
00:22:55.640 --> 00:22:56.840 the cysts will get bigger.
NOTE Confidence: 0.9623879
00:22:56.840 --> 00:22:57.880 So some of them will
NOTE Confidence: 0.9623879
00:22:57.880 --> 00:22:59.160 increase in size. The vast
NOTE Confidence: 0.9623879
00:22:59.160 --> 00:23:00.380 majority do not.
NOTE Confidence: 0.9879009
00:23:01.000 --> 00:23:02.600 The vast majority do not
NOTE Confidence: 0.9879009
00:23:02.600 --> 00:23:04.380 end up ever requiring surgery,
NOTE Confidence: 0.99734145
00:23:04.680 --> 00:23:05.900 and the vast majority
NOTE Confidence: 0.91958266

00:23:06.200 --> 00:23:07.880 never develop into pancreatic cancer.
NOTE Confidence: 0.91958266

00:23:07.880 --> 00:23:09.255 And therein lies the challenge
NOTE Confidence: 0.91958266

00:23:09.415 --> 00:23:10.615 because it makes up such
NOTE Confidence: 0.91958266

00:23:10.615 --> 00:23:12.535 a large volume. Patients are
NOTE Confidence: 0.91958266

00:23:12.535 --> 00:23:14.635 worried, we're worried, everybody's worried.
NOTE Confidence: 0.80749774

00:23:15.335 --> 00:23:16.315 So next slide.
NOTE Confidence: 0.9477978

00:23:17.095 --> 00:23:18.055 So as a result of
NOTE Confidence: 0.9477978

00:23:18.055 --> 00:23:18.855 this as we kind of
NOTE Confidence: 0.9477978

00:23:18.855 --> 00:23:20.055 work through this process of
NOTE Confidence: 0.9477978

00:23:20.055 --> 00:23:21.975 trying to stratify patients into
NOTE Confidence: 0.9477978

00:23:21.975 --> 00:23:22.775 are they high risk, are
NOTE Confidence: 0.9477978

00:23:22.775 --> 00:23:24.135 they intermediate risk or are
NOTE Confidence: 0.9477978

00:23:24.135 --> 00:23:25.359 they low risk you see
NOTE Confidence: 0.9477978

00:23:25.359 --> 00:23:26.640 how it it falls out.
NOTE Confidence: 0.9477978

00:23:26.640 --> 00:23:27.359 So for the the high
NOTE Confidence: 0.9477978

00:23:27.359 --> 00:23:28.720 risk patients, this is the

NOTE Confidence: 0.9477978

00:23:28.720 --> 00:23:29.679 group of patients that we

NOTE Confidence: 0.9477978

00:23:29.679 --> 00:23:31.119 would say, hey, we're concerned

NOTE Confidence: 0.9477978

00:23:31.119 --> 00:23:32.159 about this group based on

NOTE Confidence: 0.9477978

00:23:32.159 --> 00:23:33.359 their imaging. We need to

NOTE Confidence: 0.9477978

00:23:33.359 --> 00:23:35.200 have a multidisciplinary discussion. We

NOTE Confidence: 0.9477978

00:23:35.200 --> 00:23:36.000 need to have our surgical

NOTE Confidence: 0.9477978

00:23:36.000 --> 00:23:37.520 colleagues involved in making decisions.

NOTE Confidence: 0.9477978

00:23:37.520 --> 00:23:38.880 Is this something that needs

NOTE Confidence: 0.9477978

00:23:38.880 --> 00:23:40.740 further workup and potentially surgery?

NOTE Confidence: 0.9987607

00:23:41.054 --> 00:23:42.754 For the intermediate risk group,

NOTE Confidence: 0.9332873

00:23:43.054 --> 00:23:44.894 we do further investigations including

NOTE Confidence: 0.9332873

00:23:44.894 --> 00:23:45.394 endoscopic

NOTE Confidence: 0.9751239

00:23:45.695 --> 00:23:46.195 ultrasound.

NOTE Confidence: 0.9679499

00:23:46.815 --> 00:23:48.014 But for that low risk

NOTE Confidence: 0.9679499

00:23:48.014 --> 00:23:49.215 group that's there, again, the

NOTE Confidence: 0.9679499

00:23:49.215 --> 00:23:50.494 vast majority group, if we're
NOTE Confidence: 0.9679499

00:23:50.494 --> 00:23:52.014 comfortable with the diagnosis, if
NOTE Confidence: 0.9679499

00:23:52.014 --> 00:23:53.054 we're cult comfortable with the
NOTE Confidence: 0.9679499

00:23:53.054 --> 00:23:53.554 imaging,
NOTE Confidence: 0.96434265

00:23:53.890 --> 00:23:54.770 then we get into the
NOTE Confidence: 0.96434265

00:23:54.770 --> 00:23:55.890 discussions of saying well maybe
NOTE Confidence: 0.96434265

00:23:55.890 --> 00:23:56.770 we're not going to do
NOTE Confidence: 0.96434265

00:23:56.770 --> 00:23:58.130 surgery, maybe we're not going
NOTE Confidence: 0.96434265

00:23:58.130 --> 00:23:59.890 to do endoscopic ultrasound but
NOTE Confidence: 0.96434265

00:23:59.890 --> 00:24:00.530 we're going to have to
NOTE Confidence: 0.96434265

00:24:00.530 --> 00:24:01.490 follow you and how do
NOTE Confidence: 0.96434265

00:24:01.490 --> 00:24:02.609 we follow you is a
NOTE Confidence: 0.96434265

00:24:02.609 --> 00:24:03.429 real challenge.
NOTE Confidence: 0.9560032

00:24:03.730 --> 00:24:04.470 Next slide.
NOTE Confidence: 0.95872647

00:24:08.205 --> 00:24:09.325 I can cover these. So
NOTE Confidence: 0.95872647

00:24:09.325 --> 00:24:10.205 the the key points that

NOTE Confidence: 0.95872647
00:24:10.205 --> 00:24:11.805 we've talked about thus far
NOTE Confidence: 0.95872647
00:24:11.805 --> 00:24:13.805 are the fact that pancreatic
NOTE Confidence: 0.95872647
00:24:13.805 --> 00:24:14.785 cysts are common,
NOTE Confidence: 0.93039334
00:24:15.325 --> 00:24:17.025 discovered at an increasing rate.
NOTE Confidence: 0.9565728
00:24:17.885 --> 00:24:18.765 The goal which I think
NOTE Confidence: 0.9565728
00:24:18.765 --> 00:24:19.805 has to be emphasized is
NOTE Confidence: 0.9565728
00:24:19.805 --> 00:24:21.220 that we're trying to emphasize
NOTE Confidence: 0.9565728
00:24:21.220 --> 00:24:22.820 that small percentage of cystic
NOTE Confidence: 0.9565728
00:24:22.820 --> 00:24:24.580 lesions that are associated with
NOTE Confidence: 0.9565728
00:24:24.580 --> 00:24:26.200 a substantial risk of cancer.
NOTE Confidence: 0.8100052
00:24:27.059 --> 00:24:29.159 Combinations of imaging, symptom assessment,
NOTE Confidence: 0.8100052
00:24:29.299 --> 00:24:30.919 laboratory tests could help distinguish
NOTE Confidence: 0.9257249
00:24:31.220 --> 00:24:32.580 several benign cysts from the
NOTE Confidence: 0.9257249
00:24:32.580 --> 00:24:33.940 low, intermediate and high risk
NOTE Confidence: 0.9257249
00:24:33.940 --> 00:24:35.240 cysts that we've talked about.
NOTE Confidence: 0.96654564

00:24:35.945 --> 00:24:37.945 EUS can be considered for
NOTE Confidence: 0.96654564

00:24:37.945 --> 00:24:39.465 patients that have equivocal findings
NOTE Confidence: 0.96654564

00:24:39.465 --> 00:24:40.265 when we're trying to figure
NOTE Confidence: 0.96654564

00:24:40.265 --> 00:24:41.005 out the diagnosis,
NOTE Confidence: 0.9484395

00:24:41.385 --> 00:24:42.845 but really for those intermediate
NOTE Confidence: 0.9484395

00:24:42.905 --> 00:24:44.105 risk cysts. And then there
NOTE Confidence: 0.9484395

00:24:44.105 --> 00:24:45.545 is a really significant role
NOTE Confidence: 0.9484395

00:24:45.545 --> 00:24:46.845 for endoscopic ultrasound
NOTE Confidence: 0.95609874

00:24:47.225 --> 00:24:48.889 and sampling these cysts to
NOTE Confidence: 0.95609874

00:24:48.889 --> 00:24:50.169 not only diagnose, is it
NOTE Confidence: 0.95609874

00:24:50.169 --> 00:24:51.210 a serosyst, is it an
NOTE Confidence: 0.95609874

00:24:51.210 --> 00:24:52.809 IPMN, but also to risk
NOTE Confidence: 0.95609874

00:24:52.809 --> 00:24:53.309 stratify.
NOTE Confidence: 0.9676701

00:24:53.690 --> 00:24:54.809 And then this gets into
NOTE Confidence: 0.9676701

00:24:54.809 --> 00:24:56.250 discussions of and we'll hear
NOTE Confidence: 0.9676701

00:24:56.250 --> 00:24:57.389 from doctor Kunstman

NOTE Confidence: 0.9409972
00:24:58.009 --> 00:24:59.230 about surgical evaluation,
NOTE Confidence: 0.99140394
00:24:59.609 --> 00:25:01.049 as well as surveillance for
NOTE Confidence: 0.99140394
00:25:01.049 --> 00:25:02.909 low risk cysts. Next slide.
NOTE Confidence: 0.96255314
00:25:05.345 --> 00:25:06.225 And I'll hand you over
NOTE Confidence: 0.96255314
00:25:06.225 --> 00:25:07.365 now to doctor Kunstman.
NOTE Confidence: 0.985655
00:25:09.184 --> 00:25:10.385 I'll be happy to introduce
NOTE Confidence: 0.985655
00:25:10.385 --> 00:25:11.044 the case,
NOTE Confidence: 0.9870656
00:25:11.345 --> 00:25:13.284 the first case, for John.
NOTE Confidence: 0.95461345
00:25:13.744 --> 00:25:14.625 So this is a ninety
NOTE Confidence: 0.95461345
00:25:14.625 --> 00:25:16.005 year old male with worrisome
NOTE Confidence: 0.95461345
00:25:16.065 --> 00:25:17.845 changes in presumed mucinous pancreatic
NOTE Confidence: 0.95461345
00:25:17.904 --> 00:25:18.404 cyst.
NOTE Confidence: 0.95967764
00:25:18.929 --> 00:25:20.049 He has a history of
NOTE Confidence: 0.95967764
00:25:20.049 --> 00:25:22.450 previous urologic malignancies, prostate cancer
NOTE Confidence: 0.95967764
00:25:22.450 --> 00:25:24.869 testicular seminoma, and remission developed
NOTE Confidence: 0.95967764

00:25:24.929 --> 00:25:25.429 hematuria
NOTE Confidence: 0.9919875

00:25:25.730 --> 00:25:27.090 in twenty twenty two, which
NOTE Confidence: 0.9919875

00:25:27.090 --> 00:25:27.909 led to
NOTE Confidence: 0.96084976

00:25:28.210 --> 00:25:30.070 imaging, and that revealed multifocal
NOTE Confidence: 0.96084976

00:25:30.289 --> 00:25:31.215 pancreatic cyst.
NOTE Confidence: 0.98694676

00:25:32.095 --> 00:25:33.135 He doesn't have any history
NOTE Confidence: 0.98694676

00:25:33.135 --> 00:25:34.734 of pancreatitis or jaundice, no
NOTE Confidence: 0.98694676

00:25:34.734 --> 00:25:36.174 family history of pancreatic or
NOTE Confidence: 0.98694676

00:25:36.174 --> 00:25:38.355 BRCA related cancer, no diabetes,
NOTE Confidence: 0.98694676

00:25:38.414 --> 00:25:39.715 no exocrine insufficiency.
NOTE Confidence: 0.9597777

00:25:40.414 --> 00:25:40.914 John?
NOTE Confidence: 0.97742164

00:25:42.255 --> 00:25:43.075 Oh, additionally,
NOTE Confidence: 0.95112324

00:25:43.534 --> 00:25:44.734 some past medical history,
NOTE Confidence: 0.98421514

00:25:45.679 --> 00:25:47.940 skin cancer, atrial flutter, dyslipidemia
NOTE Confidence: 0.9562428

00:25:48.240 --> 00:25:49.140 GERD, hypothyroidism,
NOTE Confidence: 0.982262

00:25:49.520 --> 00:25:50.020 glaucoma,

NOTE Confidence: 0.88844526

00:25:50.880 --> 00:25:52.720 surgical bisurgical history. Patient had

NOTE Confidence: 0.88844526

00:25:52.720 --> 00:25:54.820 a right orchiectomy, radical prostatectomy,

NOTE Confidence: 0.87947035

00:25:55.200 --> 00:25:57.059 an inguinal, hernia repair.

NOTE Confidence: 0.9989008

00:25:57.359 --> 00:25:59.299 The medications are as listed.

NOTE Confidence: 0.946319

00:25:59.705 --> 00:26:01.405 He is married, semi retired.

NOTE Confidence: 0.946319

00:26:01.465 --> 00:26:03.484 He consumes one standard eTOH,

NOTE Confidence: 0.9716601

00:26:03.945 --> 00:26:05.865 alcoholic beverage a day, and

NOTE Confidence: 0.9716601

00:26:05.865 --> 00:26:07.065 he's a twelve pack year

NOTE Confidence: 0.9716601

00:26:07.065 --> 00:26:07.565 smoker.

NOTE Confidence: 0.9811391

00:26:08.984 --> 00:26:10.185 Yeah. I would say just

NOTE Confidence: 0.9811391

00:26:10.185 --> 00:26:11.545 even before we advance the

NOTE Confidence: 0.9811391

00:26:11.545 --> 00:26:12.045 slide,

NOTE Confidence: 0.94749796

00:26:12.425 --> 00:26:13.645 if we could go back.

NOTE Confidence: 0.94749796

00:26:13.785 --> 00:26:14.365 I mean,

NOTE Confidence: 0.9653793

00:26:16.240 --> 00:26:17.200 and it's nice to meet

NOTE Confidence: 0.9653793

00:26:17.200 --> 00:26:18.080 everybody, and thank you for
NOTE Confidence: 0.9653793

00:26:18.080 --> 00:26:19.059 the lovely invites,
NOTE Confidence: 0.9551945

00:26:19.359 --> 00:26:20.340 Karen and Anne.
NOTE Confidence: 0.98285645

00:26:21.840 --> 00:26:23.119 You know, I think from
NOTE Confidence: 0.98285645

00:26:23.119 --> 00:26:23.940 my perspective,
NOTE Confidence: 0.9850615

00:26:24.480 --> 00:26:25.760 you know, obviously, a ninety
NOTE Confidence: 0.9850615

00:26:25.760 --> 00:26:27.119 year old male being referred
NOTE Confidence: 0.9850615

00:26:27.119 --> 00:26:29.059 to surgical oncology clinic
NOTE Confidence: 0.9820874

00:26:29.385 --> 00:26:30.765 might raise some eyebrows,
NOTE Confidence: 0.99862754

00:26:31.145 --> 00:26:32.425 but the history here is
NOTE Confidence: 0.99862754

00:26:32.425 --> 00:26:34.445 really interesting. It was incidentally
NOTE Confidence: 0.937535

00:26:34.905 --> 00:26:36.905 found. And then to doctor
NOTE Confidence: 0.937535

00:26:36.905 --> 00:26:37.885 Farrell's points,
NOTE Confidence: 0.9409731

00:26:38.185 --> 00:26:39.305 you know, he doesn't have
NOTE Confidence: 0.9409731

00:26:39.305 --> 00:26:40.925 any of those worrisome findings
NOTE Confidence: 0.9409731

00:26:41.145 --> 00:26:42.185 right away on the history

NOTE Confidence: 0.9409731
00:26:42.185 --> 00:26:44.090 like pancreatitis, John does a
NOTE Confidence: 0.9409731
00:26:44.090 --> 00:26:45.710 strong personal or family history,
NOTE Confidence: 0.9908911
00:26:46.490 --> 00:26:47.850 of malignancy that might be
NOTE Confidence: 0.9908911
00:26:47.850 --> 00:26:49.369 related to the pancreas. So,
NOTE Confidence: 0.9908911
00:26:49.369 --> 00:26:50.409 you know, right away, I'm
NOTE Confidence: 0.9908911
00:26:50.409 --> 00:26:52.009 already thinking this might be
NOTE Confidence: 0.9908911
00:26:52.009 --> 00:26:53.850 a lower risk lesion, and
NOTE Confidence: 0.9908911
00:26:53.850 --> 00:26:54.809 then maybe we can go
NOTE Confidence: 0.9908911
00:26:54.809 --> 00:26:55.549 to the imaging
NOTE Confidence: 0.99765074
00:26:56.295 --> 00:26:56.795 now.
NOTE Confidence: 0.97770524
00:26:57.335 --> 00:26:58.295 So he was eighty eight
NOTE Confidence: 0.97770524
00:26:58.295 --> 00:26:59.355 when this was found.
NOTE Confidence: 0.97700363
00:27:01.015 --> 00:27:02.375 So just looking at his
NOTE Confidence: 0.97700363
00:27:02.375 --> 00:27:02.875 scan,
NOTE Confidence: 0.9653855
00:27:04.855 --> 00:27:05.494 I don't know if we
NOTE Confidence: 0.9653855

00:27:05.494 --> 00:27:06.535 can scroll through it or
NOTE Confidence: 0.9653855

00:27:06.535 --> 00:27:07.035 not.
NOTE Confidence: 0.99941534

00:27:07.655 --> 00:27:08.555 There we go.
NOTE Confidence: 0.95647395

00:27:09.410 --> 00:27:10.530 It's probably gonna go right
NOTE Confidence: 0.95647395

00:27:10.530 --> 00:27:11.450 past it since it's on
NOTE Confidence: 0.95647395

00:27:11.450 --> 00:27:12.289 a loop, but,
NOTE Confidence: 0.97142386

00:27:13.330 --> 00:27:14.770 I'll just kinda describe as
NOTE Confidence: 0.97142386

00:27:14.770 --> 00:27:16.369 it goes through there. You
NOTE Confidence: 0.97142386

00:27:16.369 --> 00:27:17.410 know, the pancreas there in
NOTE Confidence: 0.97142386

00:27:17.410 --> 00:27:18.210 the middle. You can see
NOTE Confidence: 0.97142386

00:27:18.210 --> 00:27:20.309 the calipers going past quickly.
NOTE Confidence: 0.94122094

00:27:20.609 --> 00:27:21.510 You know, basically,
NOTE Confidence: 0.965753

00:27:21.890 --> 00:27:23.190 what we see,
NOTE Confidence: 0.9997719

00:27:23.915 --> 00:27:25.054 from my perspective
NOTE Confidence: 0.96689564

00:27:26.155 --> 00:27:28.475 is three small cysts. They're
NOTE Confidence: 0.96689564

00:27:28.475 --> 00:27:29.915 they're all very bland appearing.

NOTE Confidence: 0.96689564
00:27:29.915 --> 00:27:31.615 The largest is sixteen millimeters
NOTE Confidence: 0.96689564
00:27:31.755 --> 00:27:32.975 in greatest dimension.
NOTE Confidence: 0.9575402
00:27:33.674 --> 00:27:34.575 There was no,
NOTE Confidence: 0.94332355
00:27:35.275 --> 00:27:37.035 additional features that made us
NOTE Confidence: 0.94332355
00:27:37.035 --> 00:27:37.920 worry like,
NOTE Confidence: 0.9516662
00:27:38.480 --> 00:27:40.500 main duct dilation or nodularity
NOTE Confidence: 0.9516662
00:27:40.720 --> 00:27:42.160 within the lesion like doctor
NOTE Confidence: 0.9516662
00:27:42.160 --> 00:27:43.840 Farrell was referring to. There
NOTE Confidence: 0.9516662
00:27:43.840 --> 00:27:44.800 was a tiny area of
NOTE Confidence: 0.9516662
00:27:44.800 --> 00:27:47.040 calcification, but that alone doesn't
NOTE Confidence: 0.9516662
00:27:47.040 --> 00:27:47.940 convey any,
NOTE Confidence: 0.9684729
00:27:48.400 --> 00:27:49.780 significance. Now since,
NOTE Confidence: 0.9998976
00:27:50.684 --> 00:27:52.065 the patient does have
NOTE Confidence: 0.9579605
00:27:52.365 --> 00:27:53.644 an excellent quality of life,
NOTE Confidence: 0.9579605
00:27:53.644 --> 00:27:55.184 he's still working. In fact,
NOTE Confidence: 0.9674533

00:27:55.885 --> 00:27:57.744 his performance status is excellent.

NOTE Confidence: 0.9942352

00:27:59.164 --> 00:28:00.705 Despite his advanced age,

NOTE Confidence: 0.9900329

00:28:01.164 --> 00:28:02.845 he was recommended to undergo

NOTE Confidence: 0.9900329

00:28:02.845 --> 00:28:03.345 surveillance.

NOTE Confidence: 0.9559682

00:28:06.390 --> 00:28:07.270 So we can head on

NOTE Confidence: 0.9559682

00:28:07.270 --> 00:28:08.970 to the next one. So,

NOTE Confidence: 0.9896066

00:28:09.430 --> 00:28:11.190 as many folks do, he

NOTE Confidence: 0.9896066

00:28:11.190 --> 00:28:12.890 got an early interval

NOTE Confidence: 0.9541636

00:28:13.750 --> 00:28:15.750 repeat imaging study at six

NOTE Confidence: 0.9541636

00:28:15.750 --> 00:28:16.570 months because

NOTE Confidence: 0.9757116

00:28:16.950 --> 00:28:18.869 as alluded to by, Flora

NOTE Confidence: 0.9757116

00:28:18.869 --> 00:28:20.205 and James, you know, the

NOTE Confidence: 0.9757116

00:28:20.205 --> 00:28:21.725 size is a risk factor,

NOTE Confidence: 0.9757116

00:28:21.725 --> 00:28:22.705 but one

NOTE Confidence: 0.97929287

00:28:23.165 --> 00:28:24.924 independent risk factor is the

NOTE Confidence: 0.97929287

00:28:24.924 --> 00:28:26.465 rate of cyst growth.

NOTE Confidence: 0.9901507
00:28:27.085 --> 00:28:27.585 So,
NOTE Confidence: 0.99332166
00:28:28.525 --> 00:28:30.065 our practice is typically
NOTE Confidence: 0.9080575
00:28:30.365 --> 00:28:32.605 for presumed new IPMN without
NOTE Confidence: 0.9080575
00:28:32.605 --> 00:28:34.065 any other worrisome features
NOTE Confidence: 0.9785693
00:28:34.669 --> 00:28:35.549 is to get a six
NOTE Confidence: 0.9785693
00:28:35.549 --> 00:28:37.549 month interval scan to determine
NOTE Confidence: 0.9785693
00:28:37.549 --> 00:28:39.169 whether it's one that's rapidly
NOTE Confidence: 0.9785693
00:28:39.230 --> 00:28:40.210 growing or not.
NOTE Confidence: 0.997152
00:28:41.710 --> 00:28:42.669 There was a little bit
NOTE Confidence: 0.997152
00:28:42.669 --> 00:28:44.590 of growth, nineteen millimeters, but
NOTE Confidence: 0.997152
00:28:44.590 --> 00:28:46.029 no other worrisome features. I
NOTE Confidence: 0.997152
00:28:46.029 --> 00:28:47.330 would just point out that
NOTE Confidence: 0.99238336
00:28:47.665 --> 00:28:49.525 scan was ordered without contrast,
NOTE Confidence: 0.98704547
00:28:50.065 --> 00:28:51.585 which is perfectly reasonable for
NOTE Confidence: 0.98704547
00:28:51.585 --> 00:28:52.085 surveillance.
NOTE Confidence: 0.99427027

00:28:53.025 --> 00:28:54.065 But if there are some
NOTE Confidence: 0.99427027

00:28:54.065 --> 00:28:55.505 features that you're following in
NOTE Confidence: 0.99427027

00:28:55.505 --> 00:28:56.005 particular,
NOTE Confidence: 0.9851904

00:28:56.625 --> 00:28:58.385 contrast can be helpful because
NOTE Confidence: 0.9851904

00:28:58.385 --> 00:28:59.905 enhancement of a nodule or
NOTE Confidence: 0.9851904

00:28:59.905 --> 00:29:02.440 enhancement of septations within a
NOTE Confidence: 0.9851904

00:29:02.440 --> 00:29:02.940 nodule,
NOTE Confidence: 0.9293734

00:29:03.240 --> 00:29:04.940 those are are risk factors.
NOTE Confidence: 0.9734889

00:29:05.320 --> 00:29:06.279 So he didn't have any
NOTE Confidence: 0.9734889

00:29:06.279 --> 00:29:07.000 of those, so I think
NOTE Confidence: 0.9734889

00:29:07.000 --> 00:29:08.940 an MRCP was perfectly reasonable.
NOTE Confidence: 0.9992302

00:29:09.399 --> 00:29:11.100 And based on those findings,
NOTE Confidence: 0.9992302

00:29:11.159 --> 00:29:12.059 he was recommended
NOTE Confidence: 0.99819595

00:29:12.360 --> 00:29:14.039 to get another scan at
NOTE Confidence: 0.99819595

00:29:14.039 --> 00:29:15.580 a one year interval.
NOTE Confidence: 0.9582966

00:29:16.424 --> 00:29:17.304 So that was done in

NOTE Confidence: 0.9582966
00:29:17.304 --> 00:29:18.345 twenty twenty three as you
NOTE Confidence: 0.9582966
00:29:18.345 --> 00:29:19.085 can see.
NOTE Confidence: 0.96294594
00:29:19.544 --> 00:29:20.985 The largest cyst had grown
NOTE Confidence: 0.96294594
00:29:20.985 --> 00:29:22.024 again a little bit. You
NOTE Confidence: 0.96294594
00:29:22.024 --> 00:29:23.625 know, the typical natural history
NOTE Confidence: 0.96294594
00:29:23.625 --> 00:29:25.644 of these cysts is slow
NOTE Confidence: 0.96294594
00:29:25.705 --> 00:29:26.924 progressive growth.
NOTE Confidence: 0.92082846
00:29:28.180 --> 00:29:29.700 This time, the largest was
NOTE Confidence: 0.92082846
00:29:29.700 --> 00:29:31.220 twenty two millimeters, again, with
NOTE Confidence: 0.92082846
00:29:31.220 --> 00:29:32.440 no worrisome features.
NOTE Confidence: 0.98457754
00:29:32.980 --> 00:29:34.360 Many times in patients
NOTE Confidence: 0.9840892
00:29:34.660 --> 00:29:36.040 that are perhaps,
NOTE Confidence: 0.9964631
00:29:36.580 --> 00:29:37.640 you know, younger
NOTE Confidence: 0.96176517
00:29:37.940 --> 00:29:39.540 or, you know, really exquisite
NOTE Confidence: 0.96176517
00:29:39.540 --> 00:29:40.600 performance status,
NOTE Confidence: 0.9178763

00:29:41.005 --> 00:29:43.265 that two centimeter threshold oftentimes

NOTE Confidence: 0.9178763

00:29:43.485 --> 00:29:44.705 triggers in EUS.

NOTE Confidence: 0.98057824

00:29:45.885 --> 00:29:47.005 It did not in this

NOTE Confidence: 0.98057824

00:29:47.005 --> 00:29:48.765 case after a shared decision

NOTE Confidence: 0.98057824

00:29:48.765 --> 00:29:50.865 making conversation with the patient,

NOTE Confidence: 0.99067974

00:29:52.044 --> 00:29:53.085 which I think was very

NOTE Confidence: 0.99067974

00:29:53.085 --> 00:29:54.865 reasonable, but another annual

NOTE Confidence: 0.9903636

00:29:55.260 --> 00:29:56.960 surveillance interval was recommended.

NOTE Confidence: 0.9683028

00:29:57.900 --> 00:29:59.180 That scan, which we'll show

NOTE Confidence: 0.9683028

00:29:59.180 --> 00:30:00.620 on the next slide, I

NOTE Confidence: 0.9683028

00:30:00.620 --> 00:30:01.120 believe,

NOTE Confidence: 0.99933594

00:30:02.060 --> 00:30:03.340 showed quite a bit of

NOTE Confidence: 0.99933594

00:30:03.340 --> 00:30:03.840 change.

NOTE Confidence: 0.988601

00:30:05.180 --> 00:30:06.640 So you can see there,

NOTE Confidence: 0.9870758

00:30:07.340 --> 00:30:08.300 you know, this is the

NOTE Confidence: 0.9870758

00:30:08.300 --> 00:30:08.800 MR.

NOTE Confidence: 0.98394465
00:30:09.165 --> 00:30:09.905 Now we're
NOTE Confidence: 0.99577355
00:30:10.525 --> 00:30:11.185 seeing multifocal
NOTE Confidence: 0.9430046
00:30:11.485 --> 00:30:13.005 mixed phenotype with both the
NOTE Confidence: 0.9430046
00:30:13.005 --> 00:30:14.225 main ducts dilated
NOTE Confidence: 0.9690305
00:30:14.925 --> 00:30:17.665 and multiple cysts clustering together
NOTE Confidence: 0.9690305
00:30:17.725 --> 00:30:19.665 in essentially the entire pancreas
NOTE Confidence: 0.9690305
00:30:19.725 --> 00:30:20.545 from the uncinate
NOTE Confidence: 0.9940097
00:30:21.085 --> 00:30:21.885 all the way to the
NOTE Confidence: 0.9940097
00:30:21.885 --> 00:30:22.385 tail.
NOTE Confidence: 0.9950568
00:30:23.090 --> 00:30:24.450 So a number of concerning
NOTE Confidence: 0.9950568
00:30:24.450 --> 00:30:25.590 features of progression,
NOTE Confidence: 0.9327419
00:30:26.210 --> 00:30:27.810 with just one year of
NOTE Confidence: 0.9327419
00:30:27.810 --> 00:30:29.810 surveillance, and he was recommended
NOTE Confidence: 0.9327419
00:30:29.810 --> 00:30:31.270 to undergo in the US.
NOTE Confidence: 0.9515056
00:30:31.570 --> 00:30:32.790 So he got that endoscopic
NOTE Confidence: 0.9515056

00:30:33.010 --> 00:30:33.510 ultrasound,
NOTE Confidence: 0.9734263

00:30:35.025 --> 00:30:36.545 that noted the cysts did
NOTE Confidence: 0.9734263

00:30:36.545 --> 00:30:38.145 appear to be mucinous upon
NOTE Confidence: 0.9734263

00:30:38.145 --> 00:30:38.645 aspiration.
NOTE Confidence: 0.9852272

00:30:40.385 --> 00:30:41.765 And there was some nodularity
NOTE Confidence: 0.9767506

00:30:42.225 --> 00:30:43.425 in the junction of the
NOTE Confidence: 0.9767506

00:30:43.425 --> 00:30:45.025 body and the tail that
NOTE Confidence: 0.9767506

00:30:45.025 --> 00:30:45.765 was biopsied.
NOTE Confidence: 0.8775843

00:30:47.360 --> 00:30:48.720 That biopsy you can see
NOTE Confidence: 0.8775843

00:30:48.720 --> 00:30:49.220 there,
NOTE Confidence: 0.7907887

00:30:49.840 --> 00:30:50.880 red out is again a
NOTE Confidence: 0.7907887

00:30:50.880 --> 00:30:51.380 mucinocystic
NOTE Confidence: 0.89610445

00:30:51.680 --> 00:30:53.060 lesion, not not unexpected,
NOTE Confidence: 0.9479826

00:30:54.320 --> 00:30:55.760 but there was dysplasia and
NOTE Confidence: 0.9479826

00:30:55.760 --> 00:30:57.540 that dysplasia was high grade.
NOTE Confidence: 0.9957576

00:30:57.920 --> 00:30:59.220 You know, high grade dysplasia

NOTE Confidence: 0.9957576

00:30:59.280 --> 00:31:00.020 is essentially

NOTE Confidence: 0.99284124

00:31:00.544 --> 00:31:02.385 the pathologist telling us that

NOTE Confidence: 0.99284124

00:31:02.385 --> 00:31:04.304 they're seeing pancreas cancer like

NOTE Confidence: 0.99284124

00:31:04.304 --> 00:31:05.424 cells. They're just not seeing

NOTE Confidence: 0.99284124

00:31:05.424 --> 00:31:06.965 it invade into the underlying,

NOTE Confidence: 0.98964036

00:31:08.385 --> 00:31:10.225 you know, pancreatic parenchyma still

NOTE Confidence: 0.98964036

00:31:10.225 --> 00:31:12.385 within the cyst itself. Generally,

NOTE Confidence: 0.98964036

00:31:12.385 --> 00:31:13.585 this is considered a very

NOTE Confidence: 0.98964036

00:31:13.585 --> 00:31:14.645 high risk finding,

NOTE Confidence: 0.9549699

00:31:15.400 --> 00:31:16.780 and it triggered a referral,

NOTE Confidence: 0.99971485

00:31:17.400 --> 00:31:18.140 to surgery.

NOTE Confidence: 0.98921734

00:31:20.840 --> 00:31:22.040 So I just wanna talk

NOTE Confidence: 0.98921734

00:31:22.040 --> 00:31:22.540 briefly

NOTE Confidence: 0.9656923

00:31:22.920 --> 00:31:24.280 for a patient like this,

NOTE Confidence: 0.9656923

00:31:24.280 --> 00:31:25.820 what types of surgeries

NOTE Confidence: 0.9503689

00:31:26.520 --> 00:31:27.720 might be a consideration? You
NOTE Confidence: 0.9503689

00:31:27.720 --> 00:31:28.600 can see on the right
NOTE Confidence: 0.9503689

00:31:28.600 --> 00:31:30.700 side, that cartoon there again
NOTE Confidence: 0.8913459

00:31:31.024 --> 00:31:31.904 showing what we would call
NOTE Confidence: 0.8913459

00:31:31.904 --> 00:31:33.825 a mixed IPMN where there's
NOTE Confidence: 0.8913459

00:31:33.825 --> 00:31:34.965 main duct involvement
NOTE Confidence: 0.9504129

00:31:35.505 --> 00:31:37.205 and branch duct involvement.
NOTE Confidence: 0.97638845

00:31:37.585 --> 00:31:38.945 And in this case, again,
NOTE Confidence: 0.97638845

00:31:38.945 --> 00:31:40.884 pretty much the entire pancreas
NOTE Confidence: 0.97638845

00:31:41.105 --> 00:31:41.764 was involved.
NOTE Confidence: 0.96426606

00:31:42.945 --> 00:31:44.384 The red star is about
NOTE Confidence: 0.96426606

00:31:44.384 --> 00:31:45.690 where it is, where the,
NOTE Confidence: 0.96426606

00:31:46.169 --> 00:31:48.490 dysplasia biopsy was taken. So
NOTE Confidence: 0.96426606

00:31:48.490 --> 00:31:50.270 when we're talking about surgery
NOTE Confidence: 0.96426606

00:31:50.330 --> 00:31:52.409 for IPMN disease, first and
NOTE Confidence: 0.96426606

00:31:52.409 --> 00:31:53.770 foremost, the question is there

NOTE Confidence: 0.96426606

00:31:53.770 --> 00:31:55.130 cancer there? Now, in this

NOTE Confidence: 0.96426606

00:31:55.130 --> 00:31:56.010 case, we didn't have an

NOTE Confidence: 0.96426606

00:31:56.010 --> 00:31:57.610 overt diagnosis of cancer, although

NOTE Confidence: 0.96426606

00:31:57.610 --> 00:31:58.669 we did have a diagnosis

NOTE Confidence: 0.96426606

00:31:58.730 --> 00:31:59.390 of dysplasia.

NOTE Confidence: 0.90027374

00:32:00.075 --> 00:32:01.534 Certainly with any operation,

NOTE Confidence: 0.98475266

00:32:02.235 --> 00:32:03.534 we wanna try and minimize

NOTE Confidence: 0.99893737

00:32:03.914 --> 00:32:05.054 the future risk

NOTE Confidence: 0.981548

00:32:05.355 --> 00:32:07.274 that IPMN could convey to

NOTE Confidence: 0.981548

00:32:07.274 --> 00:32:07.934 the patient.

NOTE Confidence: 0.9750021

00:32:08.475 --> 00:32:09.835 So in his case, the

NOTE Confidence: 0.9750021

00:32:09.835 --> 00:32:11.515 entire gland was affected, so

NOTE Confidence: 0.9750021

00:32:11.515 --> 00:32:12.895 there's going to be risk

NOTE Confidence: 0.9750021

00:32:13.170 --> 00:32:14.690 regardless unless he undergoes a

NOTE Confidence: 0.9750021

00:32:14.690 --> 00:32:15.430 total pancreatectomy.

NOTE Confidence: 0.9425228

00:32:16.450 --> 00:32:17.970 Now we also wanna minimize
NOTE Confidence: 0.9425228

00:32:17.970 --> 00:32:20.050 any complication risk. Generally speaking,
NOTE Confidence: 0.9425228

00:32:20.050 --> 00:32:21.410 that means that, you know,
NOTE Confidence: 0.9425228

00:32:21.410 --> 00:32:22.310 distal pancreatectomy
NOTE Confidence: 0.9298568

00:32:22.690 --> 00:32:24.070 is a lower risk operation
NOTE Confidence: 0.9298568

00:32:24.130 --> 00:32:25.990 than a Whipple procedure, but,
NOTE Confidence: 0.85293645

00:32:26.485 --> 00:32:28.164 certainly the cancer and the
NOTE Confidence: 0.85293645

00:32:28.164 --> 00:32:28.904 risk considerations
NOTE Confidence: 0.9955881

00:32:29.205 --> 00:32:30.265 supersede that.
NOTE Confidence: 0.98806936

00:32:31.044 --> 00:32:32.164 And then just alluding to
NOTE Confidence: 0.98806936

00:32:32.164 --> 00:32:33.225 that total pancreatectomy,
NOTE Confidence: 0.987871

00:32:33.605 --> 00:32:34.645 we also wanna try and
NOTE Confidence: 0.987871

00:32:34.645 --> 00:32:36.245 minimize any long term effects
NOTE Confidence: 0.987871

00:32:36.245 --> 00:32:38.184 on the patient's digestive health
NOTE Confidence: 0.99610496

00:32:38.750 --> 00:32:39.649 or metabolism
NOTE Confidence: 0.83003104

00:32:39.950 --> 00:32:40.450 now.

NOTE Confidence: 0.98139364

00:32:41.070 --> 00:32:42.830 Certainly, patients can and do

NOTE Confidence: 0.98139364

00:32:42.830 --> 00:32:45.009 develop diabetes or exocrine insufficiency

NOTE Confidence: 0.9557135

00:32:45.309 --> 00:32:46.210 after a pancreatectomy

NOTE Confidence: 0.9852695

00:32:46.830 --> 00:32:48.370 of any size.

NOTE Confidence: 0.98352253

00:32:49.389 --> 00:32:51.149 So it's important, especially from

NOTE Confidence: 0.98352253

00:32:51.149 --> 00:32:52.210 a primary care

NOTE Confidence: 0.85097003

00:32:52.825 --> 00:32:53.325 standpoint,

NOTE Confidence: 0.9888699

00:32:53.785 --> 00:32:55.865 that those considerations are discussed

NOTE Confidence: 0.9888699

00:32:55.865 --> 00:32:57.005 both with the patients

NOTE Confidence: 0.96094084

00:32:57.385 --> 00:32:59.085 and their primary care provider

NOTE Confidence: 0.96094084

00:32:59.305 --> 00:33:00.585 beforehand. And if if you

NOTE Confidence: 0.96094084

00:33:00.585 --> 00:33:01.785 can mitigate some of them

NOTE Confidence: 0.96094084

00:33:01.785 --> 00:33:02.445 by, say,

NOTE Confidence: 0.9362817

00:33:02.985 --> 00:33:04.665 an additional referral or additional

NOTE Confidence: 0.9362817

00:33:04.665 --> 00:33:06.505 conversation with a diabetes specialist,

NOTE Confidence: 0.9362817

00:33:06.505 --> 00:33:07.565 etcetera, nutritionist,
NOTE Confidence: 0.9837439

00:33:08.050 --> 00:33:09.170 Those are steps we certainly
NOTE Confidence: 0.9837439

00:33:09.170 --> 00:33:10.150 take in our multidisciplinary
NOTE Confidence: 0.9858094

00:33:10.450 --> 00:33:12.210 clinic. So, as far as
NOTE Confidence: 0.9858094

00:33:12.210 --> 00:33:13.430 the operations themselves,
NOTE Confidence: 0.98113394

00:33:13.810 --> 00:33:14.690 if you can hit the
NOTE Confidence: 0.98113394

00:33:14.690 --> 00:33:15.590 the next button,
NOTE Confidence: 0.98800254

00:33:16.530 --> 00:33:18.450 you know, Whipple procedure is
NOTE Confidence: 0.98800254

00:33:18.450 --> 00:33:19.750 the resection of the pancreatic
NOTE Confidence: 0.98800254

00:33:19.970 --> 00:33:20.470 head.
NOTE Confidence: 0.9648362

00:33:21.135 --> 00:33:22.255 Now, as you may or
NOTE Confidence: 0.9648362

00:33:22.255 --> 00:33:22.895 may not know, you know,
NOTE Confidence: 0.9648362

00:33:22.895 --> 00:33:23.695 the way the reason a
NOTE Confidence: 0.9648362

00:33:23.695 --> 00:33:24.895 Whipple procedure is done the
NOTE Confidence: 0.9648362

00:33:24.895 --> 00:33:26.255 way that it is with
NOTE Confidence: 0.9648362

00:33:26.255 --> 00:33:27.855 the duodenum being resected as

NOTE Confidence: 0.9648362
00:33:27.855 --> 00:33:28.815 well as the lower part
NOTE Confidence: 0.9648362
00:33:28.815 --> 00:33:30.495 of the bile duct is
NOTE Confidence: 0.9648362
00:33:30.495 --> 00:33:32.115 all those structures, the duodenum,
NOTE Confidence: 0.9648362
00:33:32.175 --> 00:33:33.455 the pancreatic head and the
NOTE Confidence: 0.9648362
00:33:33.455 --> 00:33:34.495 lower portion of the bile
NOTE Confidence: 0.9648362
00:33:34.495 --> 00:33:35.875 duct share the same vascular
NOTE Confidence: 0.9648362
00:33:36.015 --> 00:33:36.515 supply.
NOTE Confidence: 0.96977407
00:33:36.950 --> 00:33:38.390 So during the operation, the
NOTE Confidence: 0.96977407
00:33:38.390 --> 00:33:38.890 gastroduodenal
NOTE Confidence: 0.9922357
00:33:39.190 --> 00:33:40.330 artery gets ligated.
NOTE Confidence: 0.93864375
00:33:41.270 --> 00:33:42.790 As a result, all those
NOTE Confidence: 0.93864375
00:33:42.790 --> 00:33:43.290 structures,
NOTE Confidence: 0.9000934
00:33:43.990 --> 00:33:45.110 then need to be removed
NOTE Confidence: 0.9000934
00:33:45.110 --> 00:33:46.650 to unblock and and reconstructed.
NOTE Confidence: 0.9859024
00:33:48.390 --> 00:33:49.610 Go ahead and hit next.
NOTE Confidence: 0.9774368

00:33:50.505 --> 00:33:52.425 Conversely, a left sided operation
NOTE Confidence: 0.9774368

00:33:52.425 --> 00:33:53.565 or a distal pancreatectomy,
NOTE Confidence: 0.9882387

00:33:55.225 --> 00:33:56.845 doesn't require the reconstruction
NOTE Confidence: 0.98358357

00:33:57.145 --> 00:33:58.185 that one would have with
NOTE Confidence: 0.98358357

00:33:58.185 --> 00:33:59.245 a Whipple procedure.
NOTE Confidence: 0.9933547

00:33:59.625 --> 00:34:01.785 You simply close the divided
NOTE Confidence: 0.9933547

00:34:01.785 --> 00:34:02.765 neck of the pancreas,
NOTE Confidence: 0.98656017

00:34:03.465 --> 00:34:04.825 either with sutures or staples
NOTE Confidence: 0.98656017

00:34:04.825 --> 00:34:05.885 or a number of different
NOTE Confidence: 0.9967009

00:34:06.400 --> 00:34:08.480 techniques. Generally speaking, when this
NOTE Confidence: 0.9967009

00:34:08.480 --> 00:34:10.239 operation is done for any
NOTE Confidence: 0.9967009

00:34:10.239 --> 00:34:11.300 risk of malignancy
NOTE Confidence: 0.9645111

00:34:11.600 --> 00:34:12.820 or a known malignancy,
NOTE Confidence: 0.99484986

00:34:13.440 --> 00:34:14.660 we perform a splenectomy
NOTE Confidence: 0.99490744

00:34:15.119 --> 00:34:15.619 concomitantly
NOTE Confidence: 0.98885936

00:34:16.000 --> 00:34:18.160 with that. Reason being, almost

NOTE Confidence: 0.98885936
00:34:18.160 --> 00:34:19.200 all of the lymph nodes
NOTE Confidence: 0.98885936
00:34:19.200 --> 00:34:20.719 in that area cluster along
NOTE Confidence: 0.98885936
00:34:20.719 --> 00:34:22.345 the splenic artery and splenic
NOTE Confidence: 0.98885936
00:34:22.345 --> 00:34:22.845 hilum.
NOTE Confidence: 0.9561352
00:34:23.945 --> 00:34:25.705 So removing the pancreatic tail
NOTE Confidence: 0.9561352
00:34:25.705 --> 00:34:27.465 alone for a cancer or
NOTE Confidence: 0.9561352
00:34:27.465 --> 00:34:28.525 possible cancer
NOTE Confidence: 0.99270874
00:34:28.905 --> 00:34:30.665 is not an oncologically adequate
NOTE Confidence: 0.99270874
00:34:30.665 --> 00:34:31.165 operation.
NOTE Confidence: 0.90419436
00:34:32.745 --> 00:34:34.280 Next. Yeah. And then a
NOTE Confidence: 0.90419436
00:34:34.280 --> 00:34:35.180 total pancreatectomy.
NOTE Confidence: 0.9742928
00:34:35.640 --> 00:34:37.000 So just a quick word
NOTE Confidence: 0.9742928
00:34:37.000 --> 00:34:38.520 about that, you know, for
NOTE Confidence: 0.9742928
00:34:38.520 --> 00:34:39.660 patients with
NOTE Confidence: 0.9623044
00:34:39.960 --> 00:34:42.140 the entire gland being involved
NOTE Confidence: 0.9623044

00:34:42.200 --> 00:34:43.560 with IPMN, that is a
NOTE Confidence: 0.9623044

00:34:43.560 --> 00:34:45.400 consideration especially in a younger
NOTE Confidence: 0.9623044

00:34:45.400 --> 00:34:47.085 patient where you expect them
NOTE Confidence: 0.9623044

00:34:47.085 --> 00:34:48.125 to develop a cancer in
NOTE Confidence: 0.9623044

00:34:48.125 --> 00:34:49.344 any remnant pancreas.
NOTE Confidence: 0.9806446

00:34:51.085 --> 00:34:52.685 You know, I would say
NOTE Confidence: 0.9806446

00:34:52.685 --> 00:34:54.065 it it is an operation
NOTE Confidence: 0.9806446

00:34:54.125 --> 00:34:56.285 that obviously has severe long
NOTE Confidence: 0.9806446

00:34:56.285 --> 00:34:56.945 term metabolic
NOTE Confidence: 0.99012136

00:34:57.245 --> 00:34:58.530 effects for the patient.
NOTE Confidence: 0.9895808

00:34:58.850 --> 00:35:00.210 That being said, in the
NOTE Confidence: 0.9895808

00:35:00.210 --> 00:35:01.750 era of exocrine,
NOTE Confidence: 0.99673975

00:35:02.210 --> 00:35:03.510 you know, enzyme replacements
NOTE Confidence: 0.9752795

00:35:04.130 --> 00:35:05.410 and insulin pumps, you know,
NOTE Confidence: 0.9752795

00:35:05.410 --> 00:35:06.530 this has been well studied
NOTE Confidence: 0.9752795

00:35:06.530 --> 00:35:07.969 in our literature. Patient quality

NOTE Confidence: 0.9752795

00:35:07.969 --> 00:35:09.090 of life is actually very

NOTE Confidence: 0.9752795

00:35:09.090 --> 00:35:09.590 good.

NOTE Confidence: 0.9927245

00:35:10.450 --> 00:35:11.570 But it does take six

NOTE Confidence: 0.9927245

00:35:11.570 --> 00:35:13.285 to twelve months to resume

NOTE Confidence: 0.9927245

00:35:13.285 --> 00:35:14.805 their preoperative quality of life

NOTE Confidence: 0.9927245

00:35:14.805 --> 00:35:15.945 after a total pancreatectomy.

NOTE Confidence: 0.9818767

00:35:16.645 --> 00:35:17.364 So why don't you go

NOTE Confidence: 0.9818767

00:35:17.364 --> 00:35:18.825 ahead to the next slide?

NOTE Confidence: 0.92350864

00:35:22.245 --> 00:35:23.465 So this patient's,

NOTE Confidence: 0.9623849

00:35:24.405 --> 00:35:26.085 after a period of shared

NOTE Confidence: 0.9623849

00:35:26.085 --> 00:35:27.545 decision making and imaging,

NOTE Confidence: 0.9833051

00:35:28.239 --> 00:35:29.700 despite his advanced age,

NOTE Confidence: 0.9893354

00:35:30.640 --> 00:35:32.980 was interested in undergoing surgery.

NOTE Confidence: 0.9842341

00:35:34.400 --> 00:35:35.520 You know, I felt it

NOTE Confidence: 0.9842341

00:35:35.520 --> 00:35:37.200 was appropriate given that his

NOTE Confidence: 0.9842341

00:35:37.200 --> 00:35:39.200 performance status was as good
NOTE Confidence: 0.9842341

00:35:39.200 --> 00:35:40.800 as most sixty or seventy
NOTE Confidence: 0.9842341

00:35:40.800 --> 00:35:41.295 year olds,
NOTE Confidence: 0.99739647

00:35:42.174 --> 00:35:43.375 and I felt his other
NOTE Confidence: 0.99739647

00:35:43.375 --> 00:35:45.135 medical comorbidities could be well
NOTE Confidence: 0.99739647

00:35:45.135 --> 00:35:45.635 managed.
NOTE Confidence: 0.9756929

00:35:46.255 --> 00:35:47.214 And again, it was a
NOTE Confidence: 0.9756929

00:35:47.214 --> 00:35:48.994 decision between the patient, myself,
NOTE Confidence: 0.97418416

00:35:49.295 --> 00:35:49.954 the gastroenterologist,
NOTE Confidence: 0.99865675

00:35:50.335 --> 00:35:51.875 and the primary care physician.
NOTE Confidence: 0.9810066

00:35:53.135 --> 00:35:55.120 So he underwent an operation
NOTE Confidence: 0.9810066

00:35:55.180 --> 00:35:56.219 where we remove the left
NOTE Confidence: 0.9810066

00:35:56.219 --> 00:35:57.420 side of the pancreas, and
NOTE Confidence: 0.9810066

00:35:57.420 --> 00:35:58.860 we extended it a little
NOTE Confidence: 0.9810066

00:35:58.860 --> 00:35:59.980 bit because we wanted to
NOTE Confidence: 0.9810066

00:35:59.980 --> 00:36:01.020 remove as much of that

NOTE Confidence: 0.9810066
00:36:01.020 --> 00:36:02.380 main duct that was affected
NOTE Confidence: 0.9810066
00:36:02.380 --> 00:36:03.120 by IPMN,
NOTE Confidence: 0.9828806
00:36:03.580 --> 00:36:04.700 but we didn't wanna subject
NOTE Confidence: 0.9828806
00:36:04.700 --> 00:36:05.920 him to a total pancreatectomy.
NOTE Confidence: 0.888429
00:36:07.275 --> 00:36:07.915 He had a little bit
NOTE Confidence: 0.888429
00:36:07.915 --> 00:36:08.494 of postoperatibilis,
NOTE Confidence: 0.9191848
00:36:08.954 --> 00:36:10.335 but essentially no complications.
NOTE Confidence: 0.97828835
00:36:11.515 --> 00:36:13.114 The main complication we watch
NOTE Confidence: 0.97828835
00:36:13.114 --> 00:36:14.415 out for in any pancreatic
NOTE Confidence: 0.97828835
00:36:14.555 --> 00:36:16.575 surgery is a pancreatic fistula
NOTE Confidence: 0.97828835
00:36:16.635 --> 00:36:17.994 or leak. He had he
NOTE Confidence: 0.97828835
00:36:17.994 --> 00:36:19.299 did not have that. You
NOTE Confidence: 0.97828835
00:36:19.299 --> 00:36:20.579 can see the gross specimen
NOTE Confidence: 0.97828835
00:36:20.579 --> 00:36:21.460 there that's been,
NOTE Confidence: 0.9702895
00:36:21.859 --> 00:36:23.319 divided there in the pathology
NOTE Confidence: 0.9702895

00:36:23.380 --> 00:36:24.500 lab and right dead center
NOTE Confidence: 0.9702895

00:36:24.500 --> 00:36:25.239 in the middle.
NOTE Confidence: 0.9687588

00:36:25.859 --> 00:36:27.140 Lo and behold, he actually
NOTE Confidence: 0.9687588

00:36:27.140 --> 00:36:28.680 did have a fairly large
NOTE Confidence: 0.9687588

00:36:28.819 --> 00:36:29.319 adenocarcinoma,
NOTE Confidence: 0.98947984

00:36:30.819 --> 00:36:32.279 arising within the IPMN.
NOTE Confidence: 0.9661387

00:36:33.815 --> 00:36:35.495 The surgical margins were negative,
NOTE Confidence: 0.9661387

00:36:35.495 --> 00:36:36.955 so it was completely resected.
NOTE Confidence: 0.9983314

00:36:37.655 --> 00:36:39.095 He did have one out
NOTE Confidence: 0.9983314

00:36:39.095 --> 00:36:40.535 of forty eight harvested lymph
NOTE Confidence: 0.9983314

00:36:40.535 --> 00:36:42.155 nodes that had regional disease.
NOTE Confidence: 0.97373664

00:36:44.614 --> 00:36:46.135 So, you know, after surgery
NOTE Confidence: 0.97373664

00:36:46.135 --> 00:36:47.595 in this particular patient,
NOTE Confidence: 0.9865214

00:36:48.330 --> 00:36:50.489 you know, systemic chemotherapy is
NOTE Confidence: 0.9865214

00:36:50.489 --> 00:36:52.590 generally considered standard of care
NOTE Confidence: 0.9865214

00:36:52.810 --> 00:36:54.110 for any adenocarcinoma

NOTE Confidence: 0.98477703

00:36:54.650 --> 00:36:56.170 of the pancreas. However, you

NOTE Confidence: 0.98477703

00:36:56.170 --> 00:36:56.810 know, again,

NOTE Confidence: 0.9143315

00:36:57.130 --> 00:36:58.489 at his advanced age, there's

NOTE Confidence: 0.9143315

00:36:58.489 --> 00:37:00.250 certainly pros and cons, to

NOTE Confidence: 0.9143315

00:37:00.250 --> 00:37:01.725 consider with the toxicity for

NOTE Confidence: 0.9143315

00:37:01.725 --> 00:37:03.165 the multi agent regimens we

NOTE Confidence: 0.9143315

00:37:03.165 --> 00:37:04.765 generally use now. So that's

NOTE Confidence: 0.9143315

00:37:04.765 --> 00:37:05.905 an ongoing discussion.

NOTE Confidence: 0.9972489

00:37:06.765 --> 00:37:07.725 He did not have any

NOTE Confidence: 0.9972489

00:37:07.725 --> 00:37:09.425 issues with diabetes or exocrine

NOTE Confidence: 0.9972489

00:37:09.565 --> 00:37:10.065 insufficiency.

NOTE Confidence: 0.9986985

00:37:11.405 --> 00:37:12.785 People do need to be

NOTE Confidence: 0.9986985

00:37:12.925 --> 00:37:13.425 vaccinated

NOTE Confidence: 0.9384182

00:37:13.805 --> 00:37:14.785 if they are,

NOTE Confidence: 0.9696576

00:37:15.540 --> 00:37:17.560 having a splenectomy against encapsulated

NOTE Confidence: 0.9696576

00:37:17.780 --> 00:37:18.739 organism. Now he had an
NOTE Confidence: 0.9696576

00:37:18.739 --> 00:37:20.280 excellent primary care physician,
NOTE Confidence: 0.9934711

00:37:20.580 --> 00:37:21.940 so he was already actually
NOTE Confidence: 0.9934711

00:37:21.940 --> 00:37:22.440 vaccinated,
NOTE Confidence: 0.99897015

00:37:23.219 --> 00:37:24.840 for for his pneumococcal
NOTE Confidence: 0.8508419

00:37:25.140 --> 00:37:25.640 vaccinations.
NOTE Confidence: 0.9633357

00:37:27.275 --> 00:37:28.395 But we did give him
NOTE Confidence: 0.9633357

00:37:28.395 --> 00:37:28.895 meningococcal
NOTE Confidence: 0.8870308

00:37:29.355 --> 00:37:30.815 and haemophilus vaccinations.
NOTE Confidence: 0.8864902

00:37:31.835 --> 00:37:33.375 And certainly, he'll undergo surveillance.
NOTE Confidence: 0.98881876

00:37:33.755 --> 00:37:34.715 I think the take home
NOTE Confidence: 0.98881876

00:37:34.715 --> 00:37:35.835 points for this case, this
NOTE Confidence: 0.98881876

00:37:35.835 --> 00:37:36.975 is actually a great
NOTE Confidence: 0.9464861

00:37:37.594 --> 00:37:39.515 demonstration of everything that Flora
NOTE Confidence: 0.9464861

00:37:39.515 --> 00:37:40.715 and and and James had
NOTE Confidence: 0.9464861

00:37:40.715 --> 00:37:42.210 talked about. You know, he

NOTE Confidence: 0.9464861
00:37:42.210 --> 00:37:43.250 had a lesion that had
NOTE Confidence: 0.9464861
00:37:43.250 --> 00:37:43.989 some risk.
NOTE Confidence: 0.98554987
00:37:45.010 --> 00:37:45.969 It was felt to be
NOTE Confidence: 0.98554987
00:37:45.969 --> 00:37:47.570 appropriate to surveil him. He
NOTE Confidence: 0.98554987
00:37:47.570 --> 00:37:48.850 had some changes that triggered
NOTE Confidence: 0.98554987
00:37:48.850 --> 00:37:50.530 a further workup that led
NOTE Confidence: 0.98554987
00:37:50.530 --> 00:37:51.510 him to an operating,
NOTE Confidence: 0.96910125
00:37:52.050 --> 00:37:53.890 to the operating room. And
NOTE Confidence: 0.96910125
00:37:53.890 --> 00:37:55.090 ultimately, you know, we were
NOTE Confidence: 0.96910125
00:37:55.090 --> 00:37:56.530 able to resect his pancreas
NOTE Confidence: 0.96910125
00:37:56.530 --> 00:37:58.125 cancer before it metastasized.
NOTE Confidence: 0.95134073
00:37:59.545 --> 00:38:01.065 So, you know, again, he
NOTE Confidence: 0.95134073
00:38:01.065 --> 00:38:02.105 he was ninety, but I
NOTE Confidence: 0.95134073
00:38:02.105 --> 00:38:02.985 do think it was the
NOTE Confidence: 0.95134073
00:38:02.985 --> 00:38:03.785 right thing to do and
NOTE Confidence: 0.95134073

00:38:03.785 --> 00:38:05.305 certainly he'll enjoy a survival
NOTE Confidence: 0.95134073

00:38:05.305 --> 00:38:06.525 benefit from this intervention.
NOTE Confidence: 0.860222

00:38:07.864 --> 00:38:09.565 Okay. So I'll try and
NOTE Confidence: 0.9640701

00:38:09.920 --> 00:38:10.800 get through the next couple
NOTE Confidence: 0.9640701

00:38:10.800 --> 00:38:12.020 cases a little quicker.
NOTE Confidence: 0.99303764

00:38:12.480 --> 00:38:13.920 Our second case is a
NOTE Confidence: 0.99303764

00:38:13.920 --> 00:38:15.360 sixty four year old female
NOTE Confidence: 0.99303764

00:38:15.360 --> 00:38:17.140 with history of ankylosing spondylitis
NOTE Confidence: 0.96748686

00:38:17.440 --> 00:38:18.980 and increased epigastric
NOTE Confidence: 0.9989026

00:38:19.360 --> 00:38:20.340 and back pain.
NOTE Confidence: 0.9971523

00:38:21.120 --> 00:38:21.620 So,
NOTE Confidence: 0.86727554

00:38:22.239 --> 00:38:22.739 HBI,
NOTE Confidence: 0.9073633

00:38:23.735 --> 00:38:25.335 it's significant for chronic back
NOTE Confidence: 0.9073633

00:38:25.335 --> 00:38:27.915 pain, but recent increased episodic
NOTE Confidence: 0.87997055

00:38:28.215 --> 00:38:28.715 pain.
NOTE Confidence: 0.9107825

00:38:29.415 --> 00:38:30.155 And careful,

NOTE Confidence: 0.9415739
00:38:30.614 --> 00:38:32.695 ROS revealed that patient had
NOTE Confidence: 0.9415739
00:38:32.695 --> 00:38:33.195 postprandial
NOTE Confidence: 0.9977741
00:38:33.735 --> 00:38:34.235 exacerbation.
NOTE Confidence: 0.9129947
00:38:35.510 --> 00:38:37.349 The primary care doctor ordered
NOTE Confidence: 0.9129947
00:38:37.349 --> 00:38:38.550 a CT of the abdomen
NOTE Confidence: 0.9129947
00:38:38.550 --> 00:38:40.150 and pelvis, and that revealed
NOTE Confidence: 0.9129947
00:38:40.150 --> 00:38:41.210 a pancreatic cyst.
NOTE Confidence: 0.94735783
00:38:42.150 --> 00:38:44.950 Also relevant is that patient
NOTE Confidence: 0.94735783
00:38:44.950 --> 00:38:47.130 had remote history of pancreatitis
NOTE Confidence: 0.939481
00:38:47.430 --> 00:38:48.650 attributed to gallstones,
NOTE Confidence: 0.9994843
00:38:49.430 --> 00:38:50.810 no history of jaundice,
NOTE Confidence: 0.89972335
00:38:51.265 --> 00:38:52.625 family history of breast and
NOTE Confidence: 0.89972335
00:38:52.625 --> 00:38:53.685 GYN cancer,
NOTE Confidence: 0.9584121
00:38:54.225 --> 00:38:55.585 and no history of pancreatic
NOTE Confidence: 0.9584121
00:38:55.585 --> 00:38:56.085 cancer,
NOTE Confidence: 0.92027456

00:38:56.785 --> 00:38:58.805 no diabetes and no exocrine
NOTE Confidence: 0.92027456

00:38:58.864 --> 00:38:59.364 insufficiency.
NOTE Confidence: 0.9982305

00:39:00.305 --> 00:39:00.805 Additional
NOTE Confidence: 0.9704019

00:39:01.185 --> 00:39:02.785 past medical history significant for
NOTE Confidence: 0.9704019

00:39:02.785 --> 00:39:03.605 asthma, diverticulosis,
NOTE Confidence: 0.9106142

00:39:04.065 --> 00:39:05.825 hypertension, Graves' disease, and attention
NOTE Confidence: 0.9106142

00:39:05.825 --> 00:39:06.805 deficit disorder.
NOTE Confidence: 0.7477802

00:39:07.569 --> 00:39:07.969 By,
NOTE Confidence: 0.9964014

00:39:08.369 --> 00:39:09.349 surgical history,
NOTE Confidence: 0.9847197

00:39:09.809 --> 00:39:10.710 she had cholecystectomy,
NOTE Confidence: 0.99595356

00:39:11.010 --> 00:39:12.469 tonsillectomy, breast biopsy,
NOTE Confidence: 0.94451714

00:39:12.770 --> 00:39:13.510 home medications,
NOTE Confidence: 0.90534556

00:39:14.369 --> 00:39:15.190 as noted,
NOTE Confidence: 0.9436152

00:39:16.609 --> 00:39:18.690 and by social history, she's
NOTE Confidence: 0.9436152

00:39:18.690 --> 00:39:19.750 married, no tobacco,
NOTE Confidence: 0.99950016

00:39:20.130 --> 00:39:20.950 and consumes

NOTE Confidence: 0.99913967
00:39:21.285 --> 00:39:23.305 one to two alcoholic beverages
NOTE Confidence: 0.99913967
00:39:23.444 --> 00:39:24.184 per week.
NOTE Confidence: 0.95323634
00:39:26.964 --> 00:39:28.565 K. So, yeah, I think
NOTE Confidence: 0.95323634
00:39:28.565 --> 00:39:30.005 hitting all the important points
NOTE Confidence: 0.95323634
00:39:30.005 --> 00:39:30.505 again,
NOTE Confidence: 0.998116
00:39:31.444 --> 00:39:32.984 you know, in this particular
NOTE Confidence: 0.9993536
00:39:33.605 --> 00:39:35.045 case, you know, the imaging
NOTE Confidence: 0.9993536
00:39:35.045 --> 00:39:35.545 shows
NOTE Confidence: 0.884613
00:39:35.924 --> 00:39:36.505 a somewhat
NOTE Confidence: 0.99825245
00:39:37.310 --> 00:39:39.310 concerning cyst for somebody that
NOTE Confidence: 0.99825245
00:39:39.310 --> 00:39:40.989 had previously had imaging with
NOTE Confidence: 0.99825245
00:39:40.989 --> 00:39:41.730 no cysts
NOTE Confidence: 0.9903873
00:39:42.030 --> 00:39:43.310 in the past during workups
NOTE Confidence: 0.9903873
00:39:43.310 --> 00:39:45.090 of her chronic back pain,
NOTE Confidence: 0.99653214
00:39:45.869 --> 00:39:47.230 and that remote history of
NOTE Confidence: 0.99653214

00:39:47.230 --> 00:39:47.730 cholecystectomy.
NOTE Confidence: 0.96356165

00:39:48.590 --> 00:39:49.469 You know, here we have
NOTE Confidence: 0.96356165

00:39:49.469 --> 00:39:50.930 this three point four millimeter,
NOTE Confidence: 0.9602271

00:39:51.635 --> 00:39:53.395 or sorry, thirty four millimeter
NOTE Confidence: 0.9602271

00:39:53.395 --> 00:39:55.255 cyst. There's no clear nodularity,
NOTE Confidence: 0.9602271

00:39:55.474 --> 00:39:56.375 but quite thick,
NOTE Confidence: 0.96590865

00:39:56.915 --> 00:39:58.135 walls with some enhancements.
NOTE Confidence: 0.92356443

00:39:59.555 --> 00:40:01.155 In this case, you know,
NOTE Confidence: 0.92356443

00:40:01.155 --> 00:40:01.974 kinda contemporaneously,
NOTE Confidence: 0.99630153

00:40:02.515 --> 00:40:04.535 the the primary care physician
NOTE Confidence: 0.997536

00:40:04.920 --> 00:40:06.920 actually referred her to both
NOTE Confidence: 0.997536

00:40:06.920 --> 00:40:07.420 gastroenterology,
NOTE Confidence: 0.9645622

00:40:08.839 --> 00:40:09.980 and to my clinic,
NOTE Confidence: 0.99279517

00:40:10.280 --> 00:40:11.880 with these findings. And so
NOTE Confidence: 0.99279517

00:40:11.880 --> 00:40:12.380 I,
NOTE Confidence: 0.9954404

00:40:12.920 --> 00:40:14.200 had the luxury of having

NOTE Confidence: 0.9954404
00:40:14.200 --> 00:40:16.040 endoscopic ultrasound being done at
NOTE Confidence: 0.9954404
00:40:16.040 --> 00:40:17.160 the time she presented to
NOTE Confidence: 0.9954404
00:40:17.160 --> 00:40:17.819 my clinic.
NOTE Confidence: 0.9881548
00:40:20.085 --> 00:40:21.844 And as those we we
NOTE Confidence: 0.9881548
00:40:21.844 --> 00:40:23.205 had the ultrasound done, but
NOTE Confidence: 0.9881548
00:40:23.205 --> 00:40:24.425 we didn't have the biochemical
NOTE Confidence: 0.9881548
00:40:24.645 --> 00:40:25.145 analysis
NOTE Confidence: 0.9798555
00:40:25.605 --> 00:40:26.344 just yet.
NOTE Confidence: 0.99964094
00:40:26.645 --> 00:40:27.685 So we spoke to her
NOTE Confidence: 0.99964094
00:40:27.685 --> 00:40:28.665 about the possibilities
NOTE Confidence: 0.98533964
00:40:29.364 --> 00:40:30.105 of IPMN
NOTE Confidence: 0.9923652
00:40:30.405 --> 00:40:31.925 or MCN with a picture
NOTE Confidence: 0.9923652
00:40:31.925 --> 00:40:33.519 like this. But what really
NOTE Confidence: 0.9923652
00:40:33.519 --> 00:40:34.400 stood out to me was
NOTE Confidence: 0.9923652
00:40:34.400 --> 00:40:35.779 the history of pancreatitis
NOTE Confidence: 0.9753565

00:40:36.079 --> 00:40:37.200 in the distant past. Now
NOTE Confidence: 0.9753565

00:40:37.200 --> 00:40:38.319 again, that had been attributed
NOTE Confidence: 0.9753565

00:40:38.319 --> 00:40:39.839 to gallstones, which may have
NOTE Confidence: 0.9753565

00:40:39.839 --> 00:40:40.640 been the case, but she
NOTE Confidence: 0.9753565

00:40:40.640 --> 00:40:42.019 had now undergone cholecystectomy.
NOTE Confidence: 0.9676786

00:40:43.119 --> 00:40:44.260 But the post prandial
NOTE Confidence: 0.9973049

00:40:44.640 --> 00:40:45.140 exacerbation
NOTE Confidence: 0.96297544

00:40:45.519 --> 00:40:46.339 of her pain,
NOTE Confidence: 0.97030497

00:40:47.085 --> 00:40:48.205 really made us wonder a
NOTE Confidence: 0.97030497

00:40:48.205 --> 00:40:50.364 little bit because pancreatitis that's
NOTE Confidence: 0.97030497

00:40:50.364 --> 00:40:51.665 attributable to a cyst,
NOTE Confidence: 0.9685997

00:40:52.364 --> 00:40:53.805 as alluded to can sometimes
NOTE Confidence: 0.9685997

00:40:53.805 --> 00:40:55.405 be a diagnostic dilemma. Is
NOTE Confidence: 0.9685997

00:40:55.405 --> 00:40:56.705 the cyst causing the pancreatitis
NOTE Confidence: 0.9685997

00:40:56.925 --> 00:40:58.305 or is the cyst secondary
NOTE Confidence: 0.9954934

00:40:58.869 --> 00:40:59.690 to the pancreatitis?

NOTE Confidence: 0.9990472
00:41:00.150 --> 00:41:00.650 So
NOTE Confidence: 0.97880906
00:41:00.950 --> 00:41:01.830 we sent her for the
NOTE Confidence: 0.97880906
00:41:01.830 --> 00:41:02.330 EUS,
NOTE Confidence: 0.9679187
00:41:03.109 --> 00:41:04.869 and those findings are as
NOTE Confidence: 0.9679187
00:41:04.869 --> 00:41:06.170 listed there. In this case,
NOTE Confidence: 0.9679187
00:41:06.230 --> 00:41:08.650 the CEA on biochemical analysis
NOTE Confidence: 0.9679187
00:41:08.790 --> 00:41:09.989 was about as close to
NOTE Confidence: 0.9679187
00:41:09.989 --> 00:41:11.210 zero as you can get,
NOTE Confidence: 0.9679187
00:41:11.375 --> 00:41:12.755 And the cis fluid amylase
NOTE Confidence: 0.9679187
00:41:12.895 --> 00:41:13.694 was quite high, and a
NOTE Confidence: 0.9679187
00:41:13.694 --> 00:41:15.555 biopsy showed inflammation only.
NOTE Confidence: 0.95798445
00:41:15.934 --> 00:41:17.075 So next slide.
NOTE Confidence: 0.99601907
00:41:17.614 --> 00:41:18.734 You know, the way that
NOTE Confidence: 0.99601907
00:41:18.734 --> 00:41:20.194 we would interpret that
NOTE Confidence: 0.9805497
00:41:20.655 --> 00:41:22.494 is as a pseudocyst rather
NOTE Confidence: 0.9805497

00:41:22.494 --> 00:41:23.875 than a mucinous cyst.
NOTE Confidence: 0.9421689

00:41:24.655 --> 00:41:26.415 Interestingly enough, as we were
NOTE Confidence: 0.9421689

00:41:26.415 --> 00:41:26.915 awaiting,
NOTE Confidence: 0.99800014

00:41:27.960 --> 00:41:29.500 those biochemical results,
NOTE Confidence: 0.9977072

00:41:30.119 --> 00:41:31.000 she actually ended up in
NOTE Confidence: 0.9977072

00:41:31.000 --> 00:41:32.360 the emergency department after going
NOTE Confidence: 0.9977072

00:41:32.360 --> 00:41:33.340 to a holiday party,
NOTE Confidence: 0.94900596

00:41:33.960 --> 00:41:35.480 with serum lipase of over
NOTE Confidence: 0.94900596

00:41:35.480 --> 00:41:36.360 a thousand as you can
NOTE Confidence: 0.94900596

00:41:36.360 --> 00:41:37.400 see there after having a
NOTE Confidence: 0.94900596

00:41:37.400 --> 00:41:39.180 few glasses of red wine.
NOTE Confidence: 0.9897814

00:41:39.945 --> 00:41:41.005 So in this case,
NOTE Confidence: 0.992397

00:41:41.465 --> 00:41:43.065 the diagnosis was made of
NOTE Confidence: 0.992397

00:41:43.065 --> 00:41:44.285 acute on chronic pancreatitis
NOTE Confidence: 0.98939544

00:41:44.745 --> 00:41:46.125 with pseudocyst formation.
NOTE Confidence: 0.97134256

00:41:47.145 --> 00:41:48.505 We recommended the patient to

NOTE Confidence: 0.97134256
00:41:48.505 --> 00:41:49.705 have a bland diet and
NOTE Confidence: 0.97134256
00:41:49.705 --> 00:41:50.445 stop drinking,
NOTE Confidence: 0.95313877
00:41:51.672 --> 00:41:52.920 and she basically returned to
NOTE Confidence: 0.95313877
00:41:52.920 --> 00:41:54.040 her baseline level of of
NOTE Confidence: 0.95313877
00:41:54.040 --> 00:41:54.920 back pain. It was quite
NOTE Confidence: 0.95313877
00:41:54.920 --> 00:41:56.520 satisfied, and we did get
NOTE Confidence: 0.95313877
00:41:56.520 --> 00:41:58.040 a follow-up scan to ensure
NOTE Confidence: 0.95313877
00:41:58.040 --> 00:41:59.340 that things were improving,
NOTE Confidence: 0.97073257
00:42:00.200 --> 00:42:01.719 which it did. The cyst
NOTE Confidence: 0.97073257
00:42:01.719 --> 00:42:03.320 was gradually reducing in size,
NOTE Confidence: 0.97073257
00:42:03.320 --> 00:42:04.359 which is the natural history
NOTE Confidence: 0.97073257
00:42:04.359 --> 00:42:05.260 of most pseudocysts,
NOTE Confidence: 0.9946768
00:42:06.040 --> 00:42:07.000 that are under about five
NOTE Confidence: 0.9946768
00:42:07.000 --> 00:42:07.925 or six centimeters.
NOTE Confidence: 0.99053884
00:42:08.225 --> 00:42:09.665 So this patient needs no
NOTE Confidence: 0.99053884

00:42:09.665 --> 00:42:11.344 intervention and also needs no
NOTE Confidence: 0.99053884

00:42:11.344 --> 00:42:12.785 surveillance other than,
NOTE Confidence: 0.97784996

00:42:13.344 --> 00:42:14.705 you know, some reminders to
NOTE Confidence: 0.97784996

00:42:14.705 --> 00:42:15.745 to be cautious from a
NOTE Confidence: 0.97784996

00:42:15.745 --> 00:42:16.965 pancreatitis standpoint.
NOTE Confidence: 0.98832405

00:42:18.305 --> 00:42:20.305 And, and and she moved
NOTE Confidence: 0.98832405

00:42:20.305 --> 00:42:21.685 on with her life. So
NOTE Confidence: 0.98954993

00:42:24.690 --> 00:42:26.610 Our next case is a,
NOTE Confidence: 0.9953322

00:42:27.010 --> 00:42:28.770 patient with a worrisome cyst
NOTE Confidence: 0.9953322

00:42:28.770 --> 00:42:30.150 and a frail patient.
NOTE Confidence: 0.97549695

00:42:30.450 --> 00:42:31.410 This is a seventy three
NOTE Confidence: 0.97549695

00:42:31.410 --> 00:42:32.610 year old female with left
NOTE Confidence: 0.97549695

00:42:32.610 --> 00:42:34.290 lower quadrant pain who underwent
NOTE Confidence: 0.97549695

00:42:34.290 --> 00:42:35.750 imaging revealing diverticulitis
NOTE Confidence: 0.9567738

00:42:36.130 --> 00:42:37.270 and pancreatic cyst.
NOTE Confidence: 0.9835179

00:42:37.795 --> 00:42:39.575 Diverticulitis was treated nonoperatively.

NOTE Confidence: 0.98740417
00:42:40.355 --> 00:42:42.275 Patient is wheelchair bound, secondary
NOTE Confidence: 0.98740417
00:42:42.275 --> 00:42:43.795 to chronic low back pain
NOTE Confidence: 0.98740417
00:42:43.795 --> 00:42:45.495 and severe degenerative arthritis.
NOTE Confidence: 0.976821
00:42:46.835 --> 00:42:48.195 She has no history of
NOTE Confidence: 0.976821
00:42:48.195 --> 00:42:50.289 pancreatitis or jaundice. There's no
NOTE Confidence: 0.976821
00:42:50.289 --> 00:42:52.289 family history of pancreatic, BRCA
NOTE Confidence: 0.976821
00:42:52.289 --> 00:42:53.190 related cancers.
NOTE Confidence: 0.96206236
00:42:54.369 --> 00:42:56.130 She has long standing type
NOTE Confidence: 0.96206236
00:42:56.130 --> 00:42:58.049 one diabetes. She's actually on
NOTE Confidence: 0.96206236
00:42:58.049 --> 00:42:59.650 an insulin pump, and she
NOTE Confidence: 0.96206236
00:42:59.650 --> 00:43:01.109 has no exocrine sufficiency.
NOTE Confidence: 0.8467183
00:43:02.529 --> 00:43:03.029 For,
NOTE Confidence: 0.9353724
00:43:04.575 --> 00:43:05.055 other,
NOTE Confidence: 0.9611909
00:43:05.375 --> 00:43:07.455 past medical history, dyslipidemia GERD,
NOTE Confidence: 0.9611909
00:43:07.455 --> 00:43:08.594 obesity, hypertension,
NOTE Confidence: 0.9439392

00:43:08.974 --> 00:43:09.474 radiculopathy,
NOTE Confidence: 0.9048695

00:43:10.734 --> 00:43:12.175 by surgical history. She had
NOTE Confidence: 0.9048695

00:43:12.175 --> 00:43:13.715 the gallbladder out, appendectomy,
NOTE Confidence: 0.92382115

00:43:14.175 --> 00:43:15.695 and, foot fracture that was
NOTE Confidence: 0.92382115

00:43:15.695 --> 00:43:16.195 operated.
NOTE Confidence: 0.909285

00:43:16.850 --> 00:43:17.350 Medications
NOTE Confidence: 0.7845659

00:43:18.050 --> 00:43:20.530 as noted, statin, insulin pump,
NOTE Confidence: 0.7845659

00:43:20.690 --> 00:43:22.370 an SGLT two inhibitor that
NOTE Confidence: 0.7845659

00:43:22.370 --> 00:43:23.110 was in,
NOTE Confidence: 0.98918486

00:43:23.969 --> 00:43:24.710 blood pressure,
NOTE Confidence: 0.9968433

00:43:25.090 --> 00:43:25.590 medications,
NOTE Confidence: 0.9349826

00:43:25.969 --> 00:43:28.530 anti inflammatory, pregabalin, tramadol probably
NOTE Confidence: 0.9349826

00:43:28.530 --> 00:43:29.895 to manage her pain. And
NOTE Confidence: 0.9349826

00:43:29.895 --> 00:43:31.435 by social history, she's widowed,
NOTE Confidence: 0.9349826

00:43:31.575 --> 00:43:33.035 no tobacco or ATOH
NOTE Confidence: 0.9130563

00:43:33.415 --> 00:43:34.695 she used, and lives with

NOTE Confidence: 0.9130563
00:43:34.695 --> 00:43:36.075 an adult child.
NOTE Confidence: 0.89507914
00:43:39.735 --> 00:43:41.195 So this was an incidentally
NOTE Confidence: 0.98810625
00:43:41.575 --> 00:43:42.555 found lesion.
NOTE Confidence: 0.93783575
00:43:43.640 --> 00:43:44.680 Just for the record, her
NOTE Confidence: 0.93783575
00:43:44.680 --> 00:43:46.219 diverticulitis did resolve,
NOTE Confidence: 0.99110323
00:43:46.760 --> 00:43:47.580 with antibiotics
NOTE Confidence: 0.7652285
00:43:47.880 --> 00:43:48.380 only,
NOTE Confidence: 0.97921103
00:43:49.480 --> 00:43:50.840 and she was referred to
NOTE Confidence: 0.97921103
00:43:50.840 --> 00:43:51.580 my clinic.
NOTE Confidence: 0.8871789
00:43:53.400 --> 00:43:54.860 And her pancreatic,
NOTE Confidence: 0.8796555
00:43:55.535 --> 00:43:56.515 she really had a pancreatic
NOTE Confidence: 0.8796555
00:43:56.655 --> 00:43:58.335 body, sis, a little error
NOTE Confidence: 0.8796555
00:43:58.335 --> 00:43:59.235 there on my part,
NOTE Confidence: 0.9757473
00:43:59.695 --> 00:44:01.555 that measured over three centimeters,
NOTE Confidence: 0.9421178
00:44:02.575 --> 00:44:03.935 with some enhancements in the
NOTE Confidence: 0.9421178

00:44:03.935 --> 00:44:05.475 wall. No clear nodularity,
NOTE Confidence: 0.9666944

00:44:07.135 --> 00:44:08.335 but certainly one that would
NOTE Confidence: 0.9666944

00:44:08.335 --> 00:44:09.695 be in that intermediate risk
NOTE Confidence: 0.9666944

00:44:09.695 --> 00:44:11.430 category as doctor Farrell was
NOTE Confidence: 0.9666944

00:44:11.510 --> 00:44:13.290 was, delineating earlier.
NOTE Confidence: 0.8895832

00:44:14.390 --> 00:44:16.390 An EUS was performed that
NOTE Confidence: 0.8895832

00:44:16.390 --> 00:44:16.890 confirms
NOTE Confidence: 0.9970606

00:44:17.430 --> 00:44:17.930 the
NOTE Confidence: 0.99896204

00:44:18.309 --> 00:44:18.809 diagnosis
NOTE Confidence: 0.97815305

00:44:19.349 --> 00:44:20.250 as an IPMN.
NOTE Confidence: 0.93480736

00:44:21.430 --> 00:44:22.390 You can see the CEA
NOTE Confidence: 0.93480736

00:44:22.390 --> 00:44:23.609 level is quite elevated.
NOTE Confidence: 0.9326858

00:44:24.684 --> 00:44:25.805 The amylase level is low.
NOTE Confidence: 0.9326858

00:44:25.805 --> 00:44:27.165 A biopsy was performed. The
NOTE Confidence: 0.9326858

00:44:27.165 --> 00:44:28.765 epithelium was bland. No evidence
NOTE Confidence: 0.9326858

00:44:28.765 --> 00:44:29.425 of dysplasia.

NOTE Confidence: 0.95970005
00:44:29.805 --> 00:44:30.684 So here we have an
NOTE Confidence: 0.95970005
00:44:30.684 --> 00:44:31.184 intermediate
NOTE Confidence: 0.87201244
00:44:31.724 --> 00:44:33.805 risk lesion. So what's to
NOTE Confidence: 0.87201244
00:44:33.805 --> 00:44:35.744 do next? Kinda next slide.
NOTE Confidence: 0.87542224
00:44:37.119 --> 00:44:38.719 Yep. So the diagnosis confirmed
NOTE Confidence: 0.87542224
00:44:38.719 --> 00:44:39.520 as a branch deck to
NOTE Confidence: 0.87542224
00:44:39.520 --> 00:44:40.020 IPMN.
NOTE Confidence: 0.7744331
00:44:41.200 --> 00:44:41.680 As,
NOTE Confidence: 0.9864101
00:44:42.640 --> 00:44:43.960 Flora was was alluding to,
NOTE Confidence: 0.9864101
00:44:43.960 --> 00:44:44.880 you know, this patient was
NOTE Confidence: 0.9864101
00:44:44.880 --> 00:44:45.619 quite frail.
NOTE Confidence: 0.9479807
00:44:45.920 --> 00:44:47.119 When we evaluated in our
NOTE Confidence: 0.9479807
00:44:47.119 --> 00:44:47.619 clinic,
NOTE Confidence: 0.99165714
00:44:48.320 --> 00:44:49.599 she really had challenges with
NOTE Confidence: 0.99165714
00:44:49.599 --> 00:44:50.820 the get up and go,
NOTE Confidence: 0.9986863

00:44:51.200 --> 00:44:52.305 frailty test.
NOTE Confidence: 0.972719

00:44:53.265 --> 00:44:54.224 I would call her from
NOTE Confidence: 0.972719

00:44:54.224 --> 00:44:55.744 a from a oncologist point
NOTE Confidence: 0.972719

00:44:55.744 --> 00:44:56.864 of view, you know, ECOG,
NOTE Confidence: 0.972719

00:44:56.864 --> 00:44:57.665 you know, two on a
NOTE Confidence: 0.972719

00:44:57.665 --> 00:44:58.864 good day, kinda three on
NOTE Confidence: 0.972719

00:44:58.864 --> 00:44:59.684 a bad day.
NOTE Confidence: 0.9848234

00:45:00.305 --> 00:45:01.665 She did ambulate some at
NOTE Confidence: 0.9848234

00:45:01.665 --> 00:45:02.165 home.
NOTE Confidence: 0.8905233

00:45:03.425 --> 00:45:04.464 And, again, you know, the
NOTE Confidence: 0.8905233

00:45:04.464 --> 00:45:06.145 diagnosis of large branch doctor
NOTE Confidence: 0.8905233

00:45:06.145 --> 00:45:08.239 IPMN, but without additional worrisome
NOTE Confidence: 0.8905233

00:45:08.300 --> 00:45:08.800 features.
NOTE Confidence: 0.9741356

00:45:10.460 --> 00:45:11.340 So we had a long
NOTE Confidence: 0.9741356

00:45:11.340 --> 00:45:12.700 discussion with her, and and
NOTE Confidence: 0.9741356

00:45:12.700 --> 00:45:14.380 these can be challenging discussions,

NOTE Confidence: 0.9741356
00:45:14.380 --> 00:45:16.060 but it's important to understand
NOTE Confidence: 0.9741356
00:45:16.060 --> 00:45:17.580 what people's values are,
NOTE Confidence: 0.998244
00:45:17.980 --> 00:45:19.100 how they view their quality
NOTE Confidence: 0.998244
00:45:19.100 --> 00:45:20.000 of life, etcetera.
NOTE Confidence: 0.9905088
00:45:20.460 --> 00:45:20.960 Certainly,
NOTE Confidence: 0.9739338
00:45:22.655 --> 00:45:24.255 even a distal pancreatectomy, if
NOTE Confidence: 0.9739338
00:45:24.255 --> 00:45:24.994 done laparoscopically,
NOTE Confidence: 0.9861827
00:45:26.335 --> 00:45:27.635 that risk is is,
NOTE Confidence: 0.9974458
00:45:28.255 --> 00:45:28.994 still considerable.
NOTE Confidence: 0.99109113
00:45:29.535 --> 00:45:30.575 It's a it's a major
NOTE Confidence: 0.99109113
00:45:30.575 --> 00:45:32.015 operation, and we really felt
NOTE Confidence: 0.99109113
00:45:32.015 --> 00:45:33.234 that that risk was prohibitive
NOTE Confidence: 0.83943063
00:45:33.614 --> 00:45:34.515 for this particular
NOTE Confidence: 0.97216177
00:45:34.974 --> 00:45:36.415 patient unless there was clear
NOTE Confidence: 0.97216177
00:45:36.415 --> 00:45:38.219 evidence for a cancer there.
NOTE Confidence: 0.97216177

00:45:38.219 --> 00:45:38.940 And even then, it might
NOTE Confidence: 0.97216177

00:45:38.940 --> 00:45:39.739 not have been the right
NOTE Confidence: 0.97216177

00:45:39.739 --> 00:45:40.560 thing to do.
NOTE Confidence: 0.9540573

00:45:41.660 --> 00:45:43.260 You know, so oftentimes, the
NOTE Confidence: 0.9540573

00:45:43.260 --> 00:45:45.120 way that conversation gets steered
NOTE Confidence: 0.9540573

00:45:45.180 --> 00:45:45.680 is
NOTE Confidence: 0.9679789

00:45:46.540 --> 00:45:47.900 if we were to discover
NOTE Confidence: 0.9679789

00:45:47.900 --> 00:45:49.180 a cancer, we'd know that
NOTE Confidence: 0.9679789

00:45:49.180 --> 00:45:50.300 you don't have a cancer
NOTE Confidence: 0.9679789

00:45:50.300 --> 00:45:52.545 now based on our best
NOTE Confidence: 0.9679789

00:45:52.704 --> 00:45:53.204 guess,
NOTE Confidence: 0.9979129

00:45:53.984 --> 00:45:55.105 would you want that cancer
NOTE Confidence: 0.9979129

00:45:55.105 --> 00:45:55.825 to be treated? Would you
NOTE Confidence: 0.9979129

00:45:55.825 --> 00:45:57.265 want chemotherapy? Would you want
NOTE Confidence: 0.9979129

00:45:57.265 --> 00:45:58.325 radiation therapy?
NOTE Confidence: 0.9850602

00:45:59.265 --> 00:45:59.984 You know, if the answer

NOTE Confidence: 0.9850602

00:45:59.984 --> 00:46:00.944 is yes, then it's very

NOTE Confidence: 0.9850602

00:46:00.944 --> 00:46:02.484 reasonable to consider surveillance

NOTE Confidence: 0.9917773

00:46:03.184 --> 00:46:04.704 with the understanding that if

NOTE Confidence: 0.9917773

00:46:04.704 --> 00:46:05.585 there was a change that

NOTE Confidence: 0.9917773

00:46:05.585 --> 00:46:07.105 was concerning before any treatment

NOTE Confidence: 0.9917773

00:46:07.105 --> 00:46:07.924 could be rendered,

NOTE Confidence: 0.9793639

00:46:09.000 --> 00:46:09.520 you know, they would need

NOTE Confidence: 0.9793639

00:46:09.520 --> 00:46:10.700 to have a repeat biopsy,

NOTE Confidence: 0.9989588

00:46:11.080 --> 00:46:12.520 and there would be options

NOTE Confidence: 0.9989588

00:46:12.520 --> 00:46:13.400 for them that they could

NOTE Confidence: 0.9989588

00:46:13.400 --> 00:46:13.900 choose.

NOTE Confidence: 0.9875409

00:46:14.200 --> 00:46:15.320 But if the answer is

NOTE Confidence: 0.9875409

00:46:15.320 --> 00:46:15.820 no,

NOTE Confidence: 0.92772853

00:46:16.440 --> 00:46:17.560 and, you know, when explained

NOTE Confidence: 0.92772853

00:46:17.560 --> 00:46:18.360 to a patient in this

NOTE Confidence: 0.92772853

00:46:18.360 --> 00:46:19.960 way, they actually oftentimes do
NOTE Confidence: 0.92772853

00:46:19.960 --> 00:46:21.234 say no. I say, yeah.
NOTE Confidence: 0.92772853

00:46:21.234 --> 00:46:22.114 You know, doc, I'm I'm
NOTE Confidence: 0.92772853

00:46:22.114 --> 00:46:23.155 just not interested in that
NOTE Confidence: 0.92772853

00:46:23.155 --> 00:46:25.155 chemotherapy. If something happens, you
NOTE Confidence: 0.92772853

00:46:25.155 --> 00:46:26.614 can manage my symptoms.
NOTE Confidence: 0.988274

00:46:27.875 --> 00:46:28.835 But but I'm not having
NOTE Confidence: 0.988274

00:46:28.835 --> 00:46:30.295 surgery. I'm not having chemo.
NOTE Confidence: 0.9521642

00:46:30.994 --> 00:46:32.675 And expectant management is very
NOTE Confidence: 0.9521642

00:46:32.675 --> 00:46:33.849 reasonable. And we, you know,
NOTE Confidence: 0.9521642

00:46:33.849 --> 00:46:35.290 we give these patients, things
NOTE Confidence: 0.9521642

00:46:35.290 --> 00:46:36.489 to watch out for and
NOTE Confidence: 0.9521642

00:46:36.489 --> 00:46:37.550 the contact information.
NOTE Confidence: 0.9932735

00:46:38.170 --> 00:46:39.070 But as,
NOTE Confidence: 0.96043193

00:46:39.530 --> 00:46:40.650 said several times in this
NOTE Confidence: 0.96043193

00:46:40.650 --> 00:46:42.170 talk, these are frequent findings

NOTE Confidence: 0.96043193
00:46:42.170 --> 00:46:43.210 and, you know, this is
NOTE Confidence: 0.96043193
00:46:43.210 --> 00:46:44.570 really a disease of older
NOTE Confidence: 0.96043193
00:46:44.570 --> 00:46:45.070 patients.
NOTE Confidence: 0.9890998
00:46:46.175 --> 00:46:47.695 So, you know, deciding where
NOTE Confidence: 0.9890998
00:46:47.695 --> 00:46:49.075 we wanna deploy our surveillance
NOTE Confidence: 0.9890998
00:46:49.135 --> 00:46:50.575 resources is oftentimes a really
NOTE Confidence: 0.9890998
00:46:50.575 --> 00:46:52.355 meaningful conversation to have.
NOTE Confidence: 0.9428824
00:46:53.135 --> 00:46:54.335 You know, in this particular
NOTE Confidence: 0.9428824
00:46:54.335 --> 00:46:55.795 case, she did opt for,
NOTE Confidence: 0.98554575
00:46:56.094 --> 00:46:57.155 continued surveillance,
NOTE Confidence: 0.97008985
00:46:58.494 --> 00:46:59.375 but at a at a
NOTE Confidence: 0.97008985
00:46:59.375 --> 00:47:00.835 low frequency. So
NOTE Confidence: 0.9543167
00:47:04.469 --> 00:47:05.670 we'll pass it back to
NOTE Confidence: 0.9543167
00:47:05.670 --> 00:47:06.570 doctor Farrell.
NOTE Confidence: 0.85667455
00:47:08.310 --> 00:47:09.830 Great. Thanks very much, John.
NOTE Confidence: 0.85667455

00:47:09.830 --> 00:47:11.530 So it's very, interesting cases.
NOTE Confidence: 0.9994918

00:47:11.989 --> 00:47:12.489 So
NOTE Confidence: 0.9683182

00:47:13.350 --> 00:47:14.630 I think it's also important
NOTE Confidence: 0.9683182

00:47:14.630 --> 00:47:15.905 to stay as most people
NOTE Confidence: 0.9683182

00:47:15.905 --> 00:47:16.945 realize that the the vast
NOTE Confidence: 0.9683182

00:47:16.945 --> 00:47:18.225 majority of all cysts, not
NOTE Confidence: 0.9683182

00:47:18.225 --> 00:47:18.725 just,
NOTE Confidence: 0.9414932

00:47:19.425 --> 00:47:21.105 the IPMNs, never undergo any
NOTE Confidence: 0.9414932

00:47:21.105 --> 00:47:22.465 sort of, you know, surgical
NOTE Confidence: 0.9414932

00:47:22.465 --> 00:47:22.965 management,
NOTE Confidence: 0.9855477

00:47:23.505 --> 00:47:24.705 but yet we make decisions
NOTE Confidence: 0.9855477

00:47:24.705 --> 00:47:26.545 about following them. And this
NOTE Confidence: 0.9855477

00:47:26.545 --> 00:47:27.744 is often a very confusing
NOTE Confidence: 0.9855477

00:47:27.744 --> 00:47:29.185 area, and the guidelines have
NOTE Confidence: 0.9855477

00:47:29.185 --> 00:47:30.484 been changing and will continue
NOTE Confidence: 0.9855477

00:47:30.545 --> 00:47:31.080 to change.

NOTE Confidence: 0.97416824
00:47:31.960 --> 00:47:33.640 The references here, if anybody
NOTE Confidence: 0.97416824
00:47:33.640 --> 00:47:34.520 wants to email me, I
NOTE Confidence: 0.97416824
00:47:34.520 --> 00:47:35.640 can send you the actual
NOTE Confidence: 0.97416824
00:47:35.640 --> 00:47:37.000 article with this with this
NOTE Confidence: 0.97416824
00:47:37.000 --> 00:47:38.860 table in it. But, basically,
NOTE Confidence: 0.97416824
00:47:39.000 --> 00:47:41.080 surveillance for patients that you
NOTE Confidence: 0.97416824
00:47:41.080 --> 00:47:42.680 decide or you're going to
NOTE Confidence: 0.97416824
00:47:42.680 --> 00:47:43.180 survey
NOTE Confidence: 0.99791837
00:47:44.255 --> 00:47:45.935 is really based on the
NOTE Confidence: 0.99791837
00:47:45.935 --> 00:47:47.075 size of the lesion.
NOTE Confidence: 0.9690498
00:47:48.094 --> 00:47:49.535 And so the smaller that
NOTE Confidence: 0.9690498
00:47:49.535 --> 00:47:50.895 the lesion is, the more
NOTE Confidence: 0.9690498
00:47:50.895 --> 00:47:52.275 likely you're gonna use noninvasive
NOTE Confidence: 0.9690498
00:47:52.575 --> 00:47:54.355 imaging studies like MRI, MRCP.
NOTE Confidence: 0.9694245
00:47:55.295 --> 00:47:56.415 The bigger the the lesion
NOTE Confidence: 0.9694245

00:47:56.415 --> 00:47:57.614 gets, you're going to include
NOTE Confidence: 0.9694245

00:47:57.614 --> 00:47:59.250 endoscopic ultrasound because those are
NOTE Confidence: 0.9694245

00:47:59.250 --> 00:48:01.170 lesions you're concerned about may
NOTE Confidence: 0.9694245

00:48:01.250 --> 00:48:02.450 maybe not planning to operate
NOTE Confidence: 0.9694245

00:48:02.450 --> 00:48:03.750 on, but you're worried about.
NOTE Confidence: 0.9522737

00:48:04.290 --> 00:48:05.650 And then over time, the
NOTE Confidence: 0.9522737

00:48:05.650 --> 00:48:07.170 surveillance changes as well, whereas
NOTE Confidence: 0.9522737

00:48:07.170 --> 00:48:08.530 upfront, we kind of get
NOTE Confidence: 0.9522737

00:48:08.530 --> 00:48:10.210 more frequent imaging because we
NOTE Confidence: 0.9522737

00:48:10.210 --> 00:48:11.609 are concerned about trajectory trying
NOTE Confidence: 0.9522737

00:48:11.609 --> 00:48:13.175 to understand the cyst. But
NOTE Confidence: 0.9522737

00:48:13.175 --> 00:48:14.775 over time, we back off,
NOTE Confidence: 0.9522737

00:48:14.775 --> 00:48:16.075 especially if there's stability.
NOTE Confidence: 0.97508043

00:48:16.614 --> 00:48:17.655 And as we'll mention very
NOTE Confidence: 0.97508043

00:48:17.655 --> 00:48:18.855 briefly at the end, there
NOTE Confidence: 0.97508043

00:48:18.855 --> 00:48:20.135 may now be some discussions

NOTE Confidence: 0.97508043
00:48:20.135 --> 00:48:21.895 about stopping surveillance based on
NOTE Confidence: 0.97508043
00:48:21.895 --> 00:48:23.994 stability as well. Next slide.
NOTE Confidence: 0.98098344
00:48:25.230 --> 00:48:26.190 I have two cases, but
NOTE Confidence: 0.98098344
00:48:26.190 --> 00:48:27.150 I'll quickly go through them
NOTE Confidence: 0.98098344
00:48:27.150 --> 00:48:28.030 so you can just keep,
NOTE Confidence: 0.98098344
00:48:28.590 --> 00:48:29.090 forwarding.
NOTE Confidence: 0.9886043
00:48:29.469 --> 00:48:30.190 And I'll just you can
NOTE Confidence: 0.9886043
00:48:30.190 --> 00:48:31.390 keep forwarding here. This is
NOTE Confidence: 0.9886043
00:48:31.390 --> 00:48:32.430 just one of those cases
NOTE Confidence: 0.9886043
00:48:32.430 --> 00:48:33.570 where it's a small
NOTE Confidence: 0.96947616
00:48:34.030 --> 00:48:35.469 cyst, and you're saying to
NOTE Confidence: 0.96947616
00:48:35.469 --> 00:48:36.989 the patient, oh, probably nothing
NOTE Confidence: 0.96947616
00:48:36.989 --> 00:48:38.364 will happen, but you can
NOTE Confidence: 0.96947616
00:48:38.364 --> 00:48:39.565 stop there. But over time,
NOTE Confidence: 0.96947616
00:48:39.565 --> 00:48:40.864 this patient's cyst grew
NOTE Confidence: 0.9792722

00:48:41.405 --> 00:48:43.405 and, ended up going undergoing

NOTE Confidence: 0.9792722

00:48:43.405 --> 00:48:44.625 endoscopic evaluation.

NOTE Confidence: 0.97622997

00:48:45.325 --> 00:48:46.765 The pancreatic duct got bigger.

NOTE Confidence: 0.97622997

00:48:46.765 --> 00:48:47.405 And so this is a

NOTE Confidence: 0.97622997

00:48:47.405 --> 00:48:48.465 young JIT patient,

NOTE Confidence: 0.9566229

00:48:49.005 --> 00:48:50.525 with a relatively small cyst,

NOTE Confidence: 0.9566229

00:48:50.525 --> 00:48:52.045 like eleven millimeters to begin

NOTE Confidence: 0.9566229

00:48:52.045 --> 00:48:53.819 with. But ultimately, because it

NOTE Confidence: 0.9566229

00:48:53.819 --> 00:48:54.859 grew and the duct size

NOTE Confidence: 0.9566229

00:48:54.859 --> 00:48:55.519 was big,

NOTE Confidence: 0.87530804

00:48:57.180 --> 00:48:58.460 the patient actually elected for

NOTE Confidence: 0.87530804

00:48:58.460 --> 00:48:59.579 surgery. So go to next

NOTE Confidence: 0.87530804

00:48:59.579 --> 00:49:00.079 slide.

NOTE Confidence: 0.8250688

00:49:00.940 --> 00:49:01.839 And next slide.

NOTE Confidence: 0.94761854

00:49:02.460 --> 00:49:03.180 And at the time of

NOTE Confidence: 0.94761854

00:49:03.180 --> 00:49:04.299 surgery, again, for a patient

NOTE Confidence: 0.94761854
00:49:04.299 --> 00:49:05.420 that started with a small
NOTE Confidence: 0.94761854
00:49:05.420 --> 00:49:07.180 cyst over time go back
NOTE Confidence: 0.94761854
00:49:07.180 --> 00:49:08.775 one slide. This ended up
NOTE Confidence: 0.94761854
00:49:08.775 --> 00:49:10.694 being a, an IPMN with
NOTE Confidence: 0.94761854
00:49:10.694 --> 00:49:11.675 high grade dysplasia.
NOTE Confidence: 0.9903716
00:49:12.454 --> 00:49:13.194 Next slide.
NOTE Confidence: 0.966618
00:49:15.175 --> 00:49:16.214 This is one of the
NOTE Confidence: 0.966618
00:49:16.214 --> 00:49:17.575 more challenging patients. This is
NOTE Confidence: 0.966618
00:49:17.575 --> 00:49:18.614 like an eighty one year
NOTE Confidence: 0.966618
00:49:18.614 --> 00:49:19.655 old gentleman. So you can
NOTE Confidence: 0.966618
00:49:19.655 --> 00:49:20.535 begin to kind of have
NOTE Confidence: 0.966618
00:49:20.535 --> 00:49:21.895 that discussion saying, well, should
NOTE Confidence: 0.966618
00:49:21.895 --> 00:49:23.094 this patient even really be
NOTE Confidence: 0.966618
00:49:23.094 --> 00:49:23.755 in surveillance?
NOTE Confidence: 0.94191843
00:49:24.239 --> 00:49:25.380 But this is your pickleball
NOTE Confidence: 0.94191843

00:49:25.600 --> 00:49:26.880 playing eighty one year old
NOTE Confidence: 0.94191843

00:49:26.880 --> 00:49:28.000 who comes into clinic and
NOTE Confidence: 0.94191843

00:49:28.000 --> 00:49:29.280 wants everything done and is
NOTE Confidence: 0.94191843

00:49:29.280 --> 00:49:30.480 adamant that they want everything
NOTE Confidence: 0.94191843

00:49:30.480 --> 00:49:32.239 done. Often a very difficult
NOTE Confidence: 0.94191843

00:49:32.239 --> 00:49:32.739 conversation.
NOTE Confidence: 0.89934653

00:49:33.360 --> 00:49:34.239 But a patient with a
NOTE Confidence: 0.89934653

00:49:34.239 --> 00:49:35.600 relatively large cyst and we
NOTE Confidence: 0.89934653

00:49:35.600 --> 00:49:37.494 presumed it was branch checked
NOTE Confidence: 0.89934653

00:49:37.494 --> 00:49:38.935 IPMN and greater than three
NOTE Confidence: 0.89934653

00:49:38.935 --> 00:49:39.975 centimeters and so we do
NOTE Confidence: 0.89934653

00:49:39.975 --> 00:49:41.815 these alternating strategies but we're
NOTE Confidence: 0.89934653

00:49:41.815 --> 00:49:42.935 constantly saying to him look
NOTE Confidence: 0.89934653

00:49:42.935 --> 00:49:44.955 you know we'll reevaluate this.
NOTE Confidence: 0.90088105

00:49:45.494 --> 00:49:46.315 Next slide.
NOTE Confidence: 0.9255581

00:49:47.015 --> 00:49:48.535 So in fairness twenty twenty

NOTE Confidence: 0.9255581
00:49:48.535 --> 00:49:49.735 nine went by twenty twenty
NOTE Confidence: 0.9255581
00:49:49.735 --> 00:49:50.855 went by twenty twenty two
NOTE Confidence: 0.9255581
00:49:50.855 --> 00:49:51.960 twenty twenty three
NOTE Confidence: 0.87828135
00:49:52.920 --> 00:49:53.660 He's now,
NOTE Confidence: 0.9293299
00:49:54.839 --> 00:49:56.040 developed a second cyst in
NOTE Confidence: 0.9293299
00:49:56.040 --> 00:49:57.400 the uncertain process, and his
NOTE Confidence: 0.9293299
00:49:57.400 --> 00:49:58.359 original cyst has got a
NOTE Confidence: 0.9293299
00:49:58.359 --> 00:49:59.260 little bit bigger.
NOTE Confidence: 0.9868722
00:50:00.040 --> 00:50:00.780 Next slide.
NOTE Confidence: 0.9627746
00:50:01.400 --> 00:50:02.359 And so he finally comes
NOTE Confidence: 0.9627746
00:50:02.359 --> 00:50:04.119 into back into clinic, and
NOTE Confidence: 0.9627746
00:50:04.119 --> 00:50:05.560 this time now, he's eighty
NOTE Confidence: 0.9627746
00:50:05.560 --> 00:50:07.099 six years old, still healthy,
NOTE Confidence: 0.9627746
00:50:07.205 --> 00:50:08.325 still tells me he's playing
NOTE Confidence: 0.9627746
00:50:08.325 --> 00:50:08.825 pickleball.
NOTE Confidence: 0.9479683

00:50:09.525 --> 00:50:10.325 But we wanna have one
NOTE Confidence: 0.9479683

00:50:10.325 --> 00:50:11.525 of these discussions, and it's
NOTE Confidence: 0.9479683

00:50:11.525 --> 00:50:12.245 kind of part of the
NOTE Confidence: 0.9479683

00:50:12.245 --> 00:50:14.165 broader discussion about, like, I
NOTE Confidence: 0.9479683

00:50:14.165 --> 00:50:15.125 think it's easier for us
NOTE Confidence: 0.9479683

00:50:15.125 --> 00:50:16.405 to to get into surveillance
NOTE Confidence: 0.9479683

00:50:16.405 --> 00:50:17.685 with patients, but the really
NOTE Confidence: 0.9479683

00:50:17.685 --> 00:50:18.485 challenging thing is how do
NOTE Confidence: 0.9479683

00:50:18.485 --> 00:50:19.525 we stop surveillance with a
NOTE Confidence: 0.9479683

00:50:19.525 --> 00:50:20.805 lot of these patients? It's
NOTE Confidence: 0.9479683

00:50:20.805 --> 00:50:21.765 an issue if it doesn't
NOTE Confidence: 0.9479683

00:50:21.765 --> 00:50:23.660 make sense. It's resource utilization.
NOTE Confidence: 0.9479683

00:50:23.660 --> 00:50:24.880 It's comparison with,
NOTE Confidence: 0.991647

00:50:25.259 --> 00:50:26.539 you know, their other competing
NOTE Confidence: 0.991647

00:50:26.539 --> 00:50:27.599 with their other medical,
NOTE Confidence: 0.94683236

00:50:27.900 --> 00:50:29.180 issues. And so we had

NOTE Confidence: 0.94683236
00:50:29.180 --> 00:50:30.380 the conversation with this patient
NOTE Confidence: 0.94683236
00:50:30.380 --> 00:50:31.579 and said, look. You're eighty
NOTE Confidence: 0.94683236
00:50:31.579 --> 00:50:32.460 six years old. I know
NOTE Confidence: 0.94683236
00:50:32.460 --> 00:50:33.339 you're very healthy. I know
NOTE Confidence: 0.94683236
00:50:33.339 --> 00:50:34.219 you wanna go all the
NOTE Confidence: 0.94683236
00:50:34.219 --> 00:50:35.945 way, but let's let's bring
NOTE Confidence: 0.94683236
00:50:35.945 --> 00:50:37.325 some sanity to the situation
NOTE Confidence: 0.90693766
00:50:37.785 --> 00:50:39.385 and he negotiated himself to
NOTE Confidence: 0.90693766
00:50:39.385 --> 00:50:41.225 one final endoscopic ultrasound rightly
NOTE Confidence: 0.90693766
00:50:41.225 --> 00:50:42.185 or wrongly we said look
NOTE Confidence: 0.90693766
00:50:42.185 --> 00:50:43.485 if that's completely normal
NOTE Confidence: 0.86311734
00:50:44.505 --> 00:50:46.045 we're done we're gonna stop
NOTE Confidence: 0.86311734
00:50:46.185 --> 00:50:46.925 next slide
NOTE Confidence: 0.99303186
00:50:48.090 --> 00:50:50.010 Long story short, we sampled
NOTE Confidence: 0.99303186
00:50:50.010 --> 00:50:50.830 both cysts.
NOTE Confidence: 0.9640627

00:50:51.130 --> 00:50:52.489 One of them had high
NOTE Confidence: 0.9640627

00:50:52.489 --> 00:50:54.010 grade atypia in it, and
NOTE Confidence: 0.9640627

00:50:54.010 --> 00:50:55.390 the other had a molecular
NOTE Confidence: 0.9640627

00:50:55.450 --> 00:50:56.810 marker in the cyst that's
NOTE Confidence: 0.9640627

00:50:56.810 --> 00:50:58.330 very suggestive of an advanced
NOTE Confidence: 0.9640627

00:50:58.330 --> 00:50:59.710 neoplasia. High grade
NOTE Confidence: 0.25020742

00:51:02.744 --> 00:51:03.244 selected
NOTE Confidence: 0.9509399

00:51:03.864 --> 00:51:05.384 to stop surveillance because of
NOTE Confidence: 0.9509399

00:51:05.384 --> 00:51:07.005 other cardiac issues that arose,
NOTE Confidence: 0.9509399

00:51:07.144 --> 00:51:08.025 and so that made the
NOTE Confidence: 0.9509399

00:51:08.025 --> 00:51:09.384 decision. But just they use
NOTE Confidence: 0.9509399

00:51:09.384 --> 00:51:10.605 this case just to illustrate
NOTE Confidence: 0.9509399

00:51:10.825 --> 00:51:12.105 how challenging some of these
NOTE Confidence: 0.9509399

00:51:12.105 --> 00:51:13.005 folks are,
NOTE Confidence: 0.97501624

00:51:13.545 --> 00:51:14.904 especially when we're getting into
NOTE Confidence: 0.97501624

00:51:14.904 --> 00:51:15.940 the the time frame when

NOTE Confidence: 0.97501624

00:51:15.940 --> 00:51:17.219 we should really be backing

NOTE Confidence: 0.97501624

00:51:17.219 --> 00:51:18.739 off surveillance, not just for

NOTE Confidence: 0.97501624

00:51:18.739 --> 00:51:20.020 pancreatic cyst, but probably for

NOTE Confidence: 0.97501624

00:51:20.020 --> 00:51:21.780 other diseases as well. Next

NOTE Confidence: 0.97501624

00:51:21.780 --> 00:51:22.280 slide.

NOTE Confidence: 0.9590159

00:51:23.219 --> 00:51:24.260 So back to this kind

NOTE Confidence: 0.9590159

00:51:24.260 --> 00:51:25.480 of bigger topic

NOTE Confidence: 0.98204845

00:51:25.940 --> 00:51:27.800 of stopping low risk,

NOTE Confidence: 0.9541449

00:51:28.224 --> 00:51:30.385 IPMN pancreatic cyst surveillance. So

NOTE Confidence: 0.9541449

00:51:30.385 --> 00:51:31.505 for sure we're not applying

NOTE Confidence: 0.9541449

00:51:31.505 --> 00:51:32.545 this or not having this

NOTE Confidence: 0.9541449

00:51:32.545 --> 00:51:34.224 discussion for patients with the

NOTE Confidence: 0.9541449

00:51:34.224 --> 00:51:35.425 sorts of patients that John,

NOTE Confidence: 0.9541449

00:51:35.665 --> 00:51:36.625 ends up seeing, patients with,

NOTE Confidence: 0.9541449

00:51:36.625 --> 00:51:37.744 you know, large cyst patients

NOTE Confidence: 0.9541449

00:51:37.744 --> 00:51:38.305 who are on their way
NOTE Confidence: 0.9541449

00:51:38.305 --> 00:51:39.505 to surgery. But there are
NOTE Confidence: 0.9541449

00:51:39.505 --> 00:51:40.545 these groups of patients with
NOTE Confidence: 0.9541449

00:51:40.545 --> 00:51:42.484 one centimeter, two centimeter cyst.
NOTE Confidence: 0.97209626

00:51:42.869 --> 00:51:44.150 And now there's an evolving
NOTE Confidence: 0.97209626

00:51:44.150 --> 00:51:45.989 discussion that perhaps if they
NOTE Confidence: 0.97209626

00:51:45.989 --> 00:51:47.509 are of a certain age,
NOTE Confidence: 0.97209626

00:51:47.509 --> 00:51:48.469 maybe over the age of
NOTE Confidence: 0.97209626

00:51:48.469 --> 00:51:49.670 seventy five, if the cysts
NOTE Confidence: 0.97209626

00:51:49.670 --> 00:51:51.029 are stable for five or
NOTE Confidence: 0.97209626

00:51:51.029 --> 00:51:51.769 ten years,
NOTE Confidence: 0.990071

00:51:52.069 --> 00:51:53.509 that maybe we should stop
NOTE Confidence: 0.990071

00:51:53.509 --> 00:51:55.509 surveying them because their long
NOTE Confidence: 0.990071

00:51:55.509 --> 00:51:57.375 term outcome is very similar
NOTE Confidence: 0.990071

00:51:57.375 --> 00:51:58.975 to the general population. And
NOTE Confidence: 0.990071

00:51:58.975 --> 00:52:00.335 so this is beginning to

NOTE Confidence: 0.990071
00:52:00.335 --> 00:52:01.395 creep into guidelines,
NOTE Confidence: 0.9576919
00:52:01.695 --> 00:52:02.575 and there's more and more
NOTE Confidence: 0.9576919
00:52:02.575 --> 00:52:03.614 data accruing. So I think
NOTE Confidence: 0.9576919
00:52:03.614 --> 00:52:04.735 people need to be aware
NOTE Confidence: 0.9576919
00:52:04.735 --> 00:52:05.775 of that. And, again, it's
NOTE Confidence: 0.9576919
00:52:05.775 --> 00:52:06.575 probably one of the more
NOTE Confidence: 0.9576919
00:52:06.575 --> 00:52:08.094 challenging things we we do
NOTE Confidence: 0.9576919
00:52:08.094 --> 00:52:09.775 in PANCIS clinic is having
NOTE Confidence: 0.9576919
00:52:09.775 --> 00:52:11.460 frank discussions with people about
NOTE Confidence: 0.9576919
00:52:11.700 --> 00:52:12.200 stopping
NOTE Confidence: 0.9991161
00:52:12.820 --> 00:52:13.880 surveillance. Next slide.
NOTE Confidence: 0.99479324
00:52:15.219 --> 00:52:16.339 And so when we think
NOTE Confidence: 0.99479324
00:52:16.339 --> 00:52:17.239 about stopping
NOTE Confidence: 0.99129266
00:52:17.780 --> 00:52:19.160 pancreatic cyst surveillance,
NOTE Confidence: 0.97171533
00:52:20.099 --> 00:52:21.700 there's multiple factors that come
NOTE Confidence: 0.97171533

00:52:21.700 --> 00:52:23.140 into play. There's one group

NOTE Confidence: 0.97171533

00:52:23.140 --> 00:52:24.420 of factors which obviously has

NOTE Confidence: 0.97171533

00:52:24.420 --> 00:52:25.400 to do with the pancreatic

NOTE Confidence: 0.97171533

00:52:25.460 --> 00:52:26.785 cyst itself. You know, what

NOTE Confidence: 0.97171533

00:52:26.785 --> 00:52:28.165 type of cyst is it?

NOTE Confidence: 0.90971375

00:52:28.705 --> 00:52:29.905 Has a patient had surgery

NOTE Confidence: 0.90971375

00:52:29.905 --> 00:52:30.965 for the cyst before?

NOTE Confidence: 0.954407

00:52:32.145 --> 00:52:33.105 What does a cyst look

NOTE Confidence: 0.954407

00:52:33.105 --> 00:52:34.065 like? Do they have low

NOTE Confidence: 0.954407

00:52:34.065 --> 00:52:35.505 risk features, or are there

NOTE Confidence: 0.954407

00:52:35.505 --> 00:52:36.485 high risk features?

NOTE Confidence: 0.9783159

00:52:36.945 --> 00:52:38.325 The issue of cyst stability

NOTE Confidence: 0.9783159

00:52:38.385 --> 00:52:40.145 is very important because people

NOTE Confidence: 0.9783159

00:52:40.145 --> 00:52:41.425 are beginning to understand that

NOTE Confidence: 0.9783159

00:52:41.425 --> 00:52:42.760 maybe if cysts are stable

NOTE Confidence: 0.9783159

00:52:42.760 --> 00:52:43.560 over a long period of

NOTE Confidence: 0.9783159
00:52:43.560 --> 00:52:45.340 time, it denotes a certain
NOTE Confidence: 0.9968872
00:52:45.640 --> 00:52:47.640 biology that may not progress
NOTE Confidence: 0.9968872
00:52:47.640 --> 00:52:48.140 further.
NOTE Confidence: 0.9767218
00:52:49.239 --> 00:52:50.520 But then there's patient factors,
NOTE Confidence: 0.9767218
00:52:50.520 --> 00:52:51.320 and we don't really have
NOTE Confidence: 0.9767218
00:52:51.320 --> 00:52:52.600 an absolute age yet. We
NOTE Confidence: 0.9767218
00:52:52.600 --> 00:52:54.200 don't say seventy five, we're
NOTE Confidence: 0.9767218
00:52:54.200 --> 00:52:55.660 done. Eighty, we're done.
NOTE Confidence: 0.97461784
00:52:56.415 --> 00:52:57.614 But we certainly take age
NOTE Confidence: 0.97461784
00:52:57.614 --> 00:52:59.475 into account. We take comorbidities
NOTE Confidence: 0.95073736
00:52:59.855 --> 00:53:01.415 into account. Also, because some
NOTE Confidence: 0.95073736
00:53:01.415 --> 00:53:02.195 of the comorbidities
NOTE Confidence: 0.897327
00:53:02.495 --> 00:53:04.275 influence progression like diabetes.
NOTE Confidence: 0.94679654
00:53:04.655 --> 00:53:05.695 And then as John alluded
NOTE Confidence: 0.94679654
00:53:05.695 --> 00:53:06.815 to, like, patient preference, this
NOTE Confidence: 0.94679654

00:53:06.815 --> 00:53:07.695 is kind of shared decision
NOTE Confidence: 0.94679654

00:53:07.695 --> 00:53:08.575 making. This is like, well,
NOTE Confidence: 0.94679654

00:53:08.575 --> 00:53:09.455 what's important to you? Do
NOTE Confidence: 0.94679654

00:53:09.455 --> 00:53:10.094 you really do wanna be
NOTE Confidence: 0.94679654

00:53:10.094 --> 00:53:11.760 coming in for endoscopies and
NOTE Confidence: 0.94679654

00:53:11.760 --> 00:53:12.800 MRIs for the next five
NOTE Confidence: 0.94679654

00:53:12.800 --> 00:53:13.300 years?
NOTE Confidence: 0.91529113

00:53:14.160 --> 00:53:15.760 But there's other issues maybe,
NOTE Confidence: 0.91529113

00:53:16.000 --> 00:53:17.600 race and ethnicity kinda plays
NOTE Confidence: 0.91529113

00:53:17.600 --> 00:53:19.440 into decision making as well
NOTE Confidence: 0.91529113

00:53:19.440 --> 00:53:21.200 as ultimately resource utilization from
NOTE Confidence: 0.91529113

00:53:21.200 --> 00:53:22.500 a health system perspective.
NOTE Confidence: 0.97156113

00:53:23.120 --> 00:53:24.420 So this is an evolving
NOTE Confidence: 0.97156113

00:53:24.480 --> 00:53:24.975 topic,
NOTE Confidence: 0.9696116

00:53:25.375 --> 00:53:26.175 and I will leave you
NOTE Confidence: 0.9696116

00:53:26.175 --> 00:53:27.135 with this notice that there's

NOTE Confidence: 0.9696116

00:53:27.135 --> 00:53:29.315 a large number of, very,

NOTE Confidence: 0.949993

00:53:31.535 --> 00:53:33.795 expert and, well trained individuals

NOTE Confidence: 0.949993

00:53:33.855 --> 00:53:34.815 at Yale both on the

NOTE Confidence: 0.949993

00:53:34.815 --> 00:53:36.095 surgical side as well as

NOTE Confidence: 0.949993

00:53:36.095 --> 00:53:36.835 on the gastroenterology

NOTE Confidence: 0.96843874

00:53:37.215 --> 00:53:38.120 side. But, also one of

NOTE Confidence: 0.96843874

00:53:38.120 --> 00:53:39.320 the beautiful things about pancreatic

NOTE Confidence: 0.96843874

00:53:39.320 --> 00:53:40.540 cyst, it's a really multidisciplinary

NOTE Confidence: 0.96843874

00:53:40.680 --> 00:53:41.800 specialty. So we have wonderful

NOTE Confidence: 0.96843874

00:53:41.800 --> 00:53:42.940 pathologists and radiologists,

NOTE Confidence: 0.9890882

00:53:43.239 --> 00:53:44.280 you know, who help us

NOTE Confidence: 0.9890882

00:53:44.280 --> 00:53:46.200 manage these patients. And so

NOTE Confidence: 0.9890882

00:53:46.200 --> 00:53:47.080 I think the sorts of

NOTE Confidence: 0.9890882

00:53:47.080 --> 00:53:48.040 patients that we end up

NOTE Confidence: 0.9890882

00:53:48.040 --> 00:53:49.320 seeing in clinic in terms

NOTE Confidence: 0.9890882

00:53:49.320 --> 00:53:50.300 of co management,
NOTE Confidence: 0.98790175
00:53:50.840 --> 00:53:52.680 with primary care include next
NOTE Confidence: 0.98790175
00:53:52.680 --> 00:53:53.180 slide.
NOTE Confidence: 0.95287067
00:53:54.255 --> 00:53:55.214 You know, it is when
NOTE Confidence: 0.95287067
00:53:55.214 --> 00:53:55.934 it comes down to trying
NOTE Confidence: 0.95287067
00:53:55.934 --> 00:53:56.734 to figure out what type
NOTE Confidence: 0.95287067
00:53:56.734 --> 00:53:57.535 of cyst it is, and
NOTE Confidence: 0.95287067
00:53:57.535 --> 00:53:58.494 we can certainly help with
NOTE Confidence: 0.95287067
00:53:58.494 --> 00:53:59.694 that. And again, the vast
NOTE Confidence: 0.95287067
00:53:59.694 --> 00:54:00.734 majority of times, as I
NOTE Confidence: 0.95287067
00:54:00.734 --> 00:54:02.094 said, these small cysts turn
NOTE Confidence: 0.95287067
00:54:02.094 --> 00:54:02.895 out to be branched out
NOTE Confidence: 0.95287067
00:54:02.895 --> 00:54:03.395 IPMNs.
NOTE Confidence: 0.954184
00:54:04.094 --> 00:54:04.895 But also how do we
NOTE Confidence: 0.954184
00:54:04.895 --> 00:54:06.015 help with those branched out
NOTE Confidence: 0.954184
00:54:06.015 --> 00:54:06.515 IPMNs?

NOTE Confidence: 0.9761358
00:54:06.974 --> 00:54:07.775 At what point should we
NOTE Confidence: 0.9761358
00:54:07.775 --> 00:54:08.994 be thinking about surgery?
NOTE Confidence: 0.98199654
00:54:09.309 --> 00:54:10.190 When should we be thinking
NOTE Confidence: 0.98199654
00:54:10.190 --> 00:54:12.109 about an endoscopic ultrasound, especially
NOTE Confidence: 0.98199654
00:54:12.109 --> 00:54:13.489 for those intermediate features?
NOTE Confidence: 0.983372
00:54:13.869 --> 00:54:14.829 But, actually, what I think
NOTE Confidence: 0.983372
00:54:14.829 --> 00:54:16.109 is the larger and bigger
NOTE Confidence: 0.983372
00:54:16.109 --> 00:54:17.150 picture and the big, big
NOTE Confidence: 0.983372
00:54:17.150 --> 00:54:18.670 problem is trying to figure
NOTE Confidence: 0.983372
00:54:18.670 --> 00:54:19.630 out what to do with
NOTE Confidence: 0.983372
00:54:19.630 --> 00:54:20.829 all the low risk branch
NOTE Confidence: 0.983372
00:54:20.829 --> 00:54:21.650 direct IPMNs
NOTE Confidence: 0.8494378
00:54:22.029 --> 00:54:23.309 and decisions about do we
NOTE Confidence: 0.8494378
00:54:23.309 --> 00:54:24.130 start surveillance?
NOTE Confidence: 0.9989786
00:54:24.705 --> 00:54:25.605 How do we
NOTE Confidence: 0.9639578

00:54:25.985 --> 00:54:27.665 survey? How frequently do we
NOTE Confidence: 0.9639578

00:54:27.665 --> 00:54:28.864 survey? And when do we
NOTE Confidence: 0.9639578

00:54:28.864 --> 00:54:30.245 think about stopping surveillance?
NOTE Confidence: 0.9365604

00:54:38.540 --> 00:54:39.200 We can
NOTE Confidence: 0.9754509

00:54:40.300 --> 00:54:41.739 I was just, I was
NOTE Confidence: 0.9754509

00:54:41.739 --> 00:54:42.619 just answering one of the
NOTE Confidence: 0.9754509

00:54:42.619 --> 00:54:43.839 questions in the chat,
NOTE Confidence: 0.7884949

00:54:44.460 --> 00:54:45.680 but, James, Flora,
NOTE Confidence: 0.95212793

00:54:46.380 --> 00:54:47.900 I'm curious, before I type
NOTE Confidence: 0.95212793

00:54:47.900 --> 00:54:48.960 anything to Jill?
NOTE Confidence: 0.91434336

00:54:49.820 --> 00:54:50.859 You know, the question is,
NOTE Confidence: 0.91434336

00:54:50.859 --> 00:54:51.900 can you talk about how
NOTE Confidence: 0.91434336

00:54:51.900 --> 00:54:52.994 to use a one c
NOTE Confidence: 0.91434336

00:54:52.994 --> 00:54:54.515 and c a nineteen dash
NOTE Confidence: 0.91434336

00:54:54.515 --> 00:54:56.035 nine levels should PCPs be
NOTE Confidence: 0.91434336

00:54:56.035 --> 00:54:58.055 ordering them for SIS follow-up

NOTE Confidence: 0.91434336

00:54:58.194 --> 00:54:59.015 or or not?

NOTE Confidence: 0.990823

00:55:00.035 --> 00:55:00.914 You know, that's actually a

NOTE Confidence: 0.990823

00:55:00.914 --> 00:55:01.895 really good question.

NOTE Confidence: 0.99019074

00:55:02.275 --> 00:55:04.114 There's arguments for following them

NOTE Confidence: 0.99019074

00:55:04.114 --> 00:55:05.255 and and for not.

NOTE Confidence: 0.99659157

00:55:06.210 --> 00:55:07.810 They generally are not included

NOTE Confidence: 0.99659157

00:55:07.810 --> 00:55:09.250 as firm recommendations in the

NOTE Confidence: 0.99659157

00:55:09.250 --> 00:55:09.750 guidelines.

NOTE Confidence: 0.98709846

00:55:10.530 --> 00:55:12.369 My personal practice is for

NOTE Confidence: 0.98709846

00:55:12.369 --> 00:55:13.750 somebody who is nondiabetic.

NOTE Confidence: 0.97429603

00:55:14.050 --> 00:55:14.930 We don't follow the a

NOTE Confidence: 0.97429603

00:55:14.930 --> 00:55:15.989 one c at all.

NOTE Confidence: 0.925737

00:55:18.290 --> 00:55:19.589 In terms of cyst surveillance,

NOTE Confidence: 0.925737

00:55:19.650 --> 00:55:21.010 James, I'm curious what you

NOTE Confidence: 0.925737

00:55:21.010 --> 00:55:23.035 do. And CA nineteen nine,

NOTE Confidence: 0.925737

00:55:23.035 --> 00:55:23.755 I like to get a
NOTE Confidence: 0.925737

00:55:23.755 --> 00:55:24.255 baseline
NOTE Confidence: 0.9773718

00:55:24.715 --> 00:55:26.235 level and correlate it with
NOTE Confidence: 0.9773718

00:55:26.235 --> 00:55:27.455 any imaging changes,
NOTE Confidence: 0.960061

00:55:28.795 --> 00:55:30.395 keeping in mind that nineteen
NOTE Confidence: 0.960061

00:55:30.395 --> 00:55:31.755 nine should always be sent
NOTE Confidence: 0.960061

00:55:31.755 --> 00:55:32.575 with concomitant
NOTE Confidence: 0.9793071

00:55:32.875 --> 00:55:33.375 LFTs.
NOTE Confidence: 0.96150553

00:55:35.619 --> 00:55:37.060 Somewhat similar. I think it's
NOTE Confidence: 0.96150553

00:55:37.060 --> 00:55:38.100 a you know, to go
NOTE Confidence: 0.96150553

00:55:38.100 --> 00:55:38.739 to the end of the
NOTE Confidence: 0.96150553

00:55:38.739 --> 00:55:40.520 discussion and say it's a,
NOTE Confidence: 0.9588978

00:55:41.219 --> 00:55:43.320 a very practical issue from
NOTE Confidence: 0.9588978

00:55:43.380 --> 00:55:45.060 a patient management perspective because
NOTE Confidence: 0.9588978

00:55:45.060 --> 00:55:46.420 we get the results back.
NOTE Confidence: 0.9588978

00:55:46.420 --> 00:55:47.140 And a lot of our

NOTE Confidence: 0.9588978

00:55:47.140 --> 00:55:48.760 patients have mildly elevated hemoglobin

NOTE Confidence: 0.9588978

00:55:48.820 --> 00:55:50.020 a one c's, mildly elevated

NOTE Confidence: 0.9588978

00:55:50.020 --> 00:55:51.195 c a ninety nines that

NOTE Confidence: 0.9588978

00:55:51.195 --> 00:55:52.155 leads to other tests. And

NOTE Confidence: 0.9588978

00:55:52.155 --> 00:55:53.195 so the question is, is

NOTE Confidence: 0.9588978

00:55:53.195 --> 00:55:54.715 it really worth, you know,

NOTE Confidence: 0.9588978

00:55:54.715 --> 00:55:55.915 going going down this road?

NOTE Confidence: 0.9588978

00:55:55.915 --> 00:55:56.635 We know that c a

NOTE Confidence: 0.9588978

00:55:56.635 --> 00:55:57.835 ninety nine is not a

NOTE Confidence: 0.9588978

00:55:57.835 --> 00:55:59.355 great tumor marker for pancreatic

NOTE Confidence: 0.9588978

00:55:59.355 --> 00:56:00.475 cancer, but I do agree

NOTE Confidence: 0.9588978

00:56:00.475 --> 00:56:01.195 it's good to have a

NOTE Confidence: 0.9588978

00:56:01.195 --> 00:56:01.695 baseline,

NOTE Confidence: 0.9813422

00:56:02.155 --> 00:56:03.435 you know, just in case

NOTE Confidence: 0.9813422

00:56:03.435 --> 00:56:04.555 it rises later on in

NOTE Confidence: 0.9813422

00:56:04.555 --> 00:56:05.435 the patient's course. Because you're
NOTE Confidence: 0.9813422

00:56:05.435 --> 00:56:06.555 gonna be following these patients
NOTE Confidence: 0.9813422

00:56:06.555 --> 00:56:08.469 for four, five, six, ten,
NOTE Confidence: 0.9813422

00:56:08.609 --> 00:56:09.430 fifteen years.
NOTE Confidence: 0.95796853

00:56:09.730 --> 00:56:10.770 The hemoglobin a one c
NOTE Confidence: 0.95796853

00:56:10.770 --> 00:56:11.650 and the diabetes is a
NOTE Confidence: 0.95796853

00:56:11.650 --> 00:56:13.010 slightly different story because there's
NOTE Confidence: 0.95796853

00:56:13.010 --> 00:56:14.450 growing data about the role
NOTE Confidence: 0.95796853

00:56:14.450 --> 00:56:16.950 of just diabetes in accelerating
NOTE Confidence: 0.95796853

00:56:17.010 --> 00:56:18.770 progression of patients with branch
NOTE Confidence: 0.95796853

00:56:18.770 --> 00:56:20.775 of IPMNs, IPMNs, but also
NOTE Confidence: 0.95796853

00:56:20.775 --> 00:56:21.974 the role of just new
NOTE Confidence: 0.95796853

00:56:21.974 --> 00:56:23.494 onset diabetes as a risk
NOTE Confidence: 0.95796853

00:56:23.494 --> 00:56:24.614 factor for the development of
NOTE Confidence: 0.95796853

00:56:24.614 --> 00:56:25.114 cancer.
NOTE Confidence: 0.9474871

00:56:25.655 --> 00:56:26.855 So it works kind of

NOTE Confidence: 0.9474871
00:56:26.855 --> 00:56:27.775 both ways. Yes. It's a
NOTE Confidence: 0.9474871
00:56:27.815 --> 00:56:28.535 it can be a good
NOTE Confidence: 0.9474871
00:56:28.535 --> 00:56:29.035 biomarker,
NOTE Confidence: 0.98954356
00:56:29.655 --> 00:56:30.535 but it can also be
NOTE Confidence: 0.98954356
00:56:30.535 --> 00:56:31.415 a way of trying to
NOTE Confidence: 0.98954356
00:56:31.415 --> 00:56:32.454 decrease that risk in these
NOTE Confidence: 0.98954356
00:56:32.454 --> 00:56:34.010 patients who we're surveying. We
NOTE Confidence: 0.98954356
00:56:34.010 --> 00:56:34.890 don't have all the data
NOTE Confidence: 0.98954356
00:56:34.890 --> 00:56:35.609 there, but I think it
NOTE Confidence: 0.98954356
00:56:35.609 --> 00:56:36.589 is worth following.
NOTE Confidence: 0.94309366
00:56:37.210 --> 00:56:37.849 I think there are a
NOTE Confidence: 0.94309366
00:56:37.849 --> 00:56:38.730 lot of patients out there
NOTE Confidence: 0.94309366
00:56:38.730 --> 00:56:39.849 who, you know, I think
NOTE Confidence: 0.94309366
00:56:39.849 --> 00:56:41.450 can obviously benefit from, you
NOTE Confidence: 0.94309366
00:56:41.450 --> 00:56:43.530 know, healthier lifestyles and better
NOTE Confidence: 0.94309366

00:56:43.530 --> 00:56:45.390 controlled blood sugars. It's certainly

NOTE Confidence: 0.94309366

00:56:45.450 --> 00:56:46.734 challenging. But I do actually

NOTE Confidence: 0.94309366

00:56:46.734 --> 00:56:48.015 monitor the hemoglobin a one

NOTE Confidence: 0.94309366

00:56:48.015 --> 00:56:48.734 c a little bit more

NOTE Confidence: 0.94309366

00:56:48.734 --> 00:56:49.695 closely than the c n

NOTE Confidence: 0.94309366

00:56:49.695 --> 00:56:50.515 nineteen nine.

NOTE Confidence: 0.9925034

00:56:52.815 --> 00:56:53.315 Fantastic.

NOTE Confidence: 0.92324346

00:56:54.895 --> 00:56:55.855 And while we're on the

NOTE Confidence: 0.92324346

00:56:55.855 --> 00:56:56.355 hour,

NOTE Confidence: 0.8298663

00:56:56.734 --> 00:56:57.935 Flora, did you wanna say

NOTE Confidence: 0.8298663

00:56:57.935 --> 00:56:59.600 something the last? Week. Yes.

NOTE Confidence: 0.8298663

00:56:59.600 --> 00:57:00.560 Well, I have a question

NOTE Confidence: 0.8298663

00:57:00.560 --> 00:57:01.680 for James, and,

NOTE Confidence: 0.9474224

00:57:02.239 --> 00:57:03.680 that pertains to how far

NOTE Confidence: 0.9474224

00:57:03.680 --> 00:57:04.960 are we in research these

NOTE Confidence: 0.9474224

00:57:04.960 --> 00:57:06.640 days with endoscopic ultrasound and

NOTE Confidence: 0.9474224
00:57:06.640 --> 00:57:07.360 using of,
NOTE Confidence: 0.9781083
00:57:08.480 --> 00:57:10.000 laser optical cameras to get
NOTE Confidence: 0.9781083
00:57:10.000 --> 00:57:11.680 a microscopic view of the
NOTE Confidence: 0.9781083
00:57:11.680 --> 00:57:13.455 cyst wall. And is that,
NOTE Confidence: 0.9781083
00:57:13.695 --> 00:57:15.614 in development? Is it coming,
NOTE Confidence: 0.9682682
00:57:15.935 --> 00:57:17.555 down the pike soon or
NOTE Confidence: 0.9682682
00:57:17.695 --> 00:57:18.815 using AI as well to
NOTE Confidence: 0.9682682
00:57:18.815 --> 00:57:20.335 analyze the images and to
NOTE Confidence: 0.9682682
00:57:20.335 --> 00:57:21.795 identify the high risks,
NOTE Confidence: 0.8407108
00:57:22.975 --> 00:57:24.675 eventually with the cyst transforming?
NOTE Confidence: 0.9477676
00:57:25.455 --> 00:57:26.735 Yeah. No. There's definitely a
NOTE Confidence: 0.9477676
00:57:26.735 --> 00:57:26.975 lot of,
NOTE Confidence: 0.899122
00:57:30.820 --> 00:57:32.500 put small cameras into assist
NOTE Confidence: 0.899122
00:57:32.500 --> 00:57:33.620 to get more imaging. It's
NOTE Confidence: 0.899122
00:57:33.620 --> 00:57:35.460 still considered a research tool.
NOTE Confidence: 0.899122

00:57:35.460 --> 00:57:36.420 May not well be applied
NOTE Confidence: 0.899122

00:57:36.420 --> 00:57:37.620 to the to the broader
NOTE Confidence: 0.899122

00:57:37.620 --> 00:57:39.540 spectrum. I think there are
NOTE Confidence: 0.899122

00:57:39.540 --> 00:57:40.040 still,
NOTE Confidence: 0.9154805

00:57:40.900 --> 00:57:42.680 exciting developments in understanding
NOTE Confidence: 0.91371566

00:57:43.145 --> 00:57:44.265 how cells develop and how
NOTE Confidence: 0.91371566

00:57:44.265 --> 00:57:45.565 they progress and understanding
NOTE Confidence: 0.95777386

00:57:45.865 --> 00:57:47.464 if there's diagnostic tests, like
NOTE Confidence: 0.95777386

00:57:47.464 --> 00:57:48.744 molecular tests that could help
NOTE Confidence: 0.95777386

00:57:48.744 --> 00:57:50.185 us understand that. And, of
NOTE Confidence: 0.95777386

00:57:50.185 --> 00:57:51.545 course, you can't get through
NOTE Confidence: 0.95777386

00:57:51.545 --> 00:57:52.045 any,
NOTE Confidence: 0.98129475

00:57:52.984 --> 00:57:54.425 conference these days without mentioning
NOTE Confidence: 0.98129475

00:57:54.425 --> 00:57:55.545 the word AI. And so,
NOTE Confidence: 0.98129475

00:57:55.545 --> 00:57:57.325 yes, AI is right there
NOTE Confidence: 0.98129475

00:57:57.545 --> 00:58:00.000 in analyzing and coanalyzing with

NOTE Confidence: 0.98129475
00:58:00.000 --> 00:58:00.500 radiologists,
NOTE Confidence: 0.93918025
00:58:00.880 --> 00:58:02.980 MRI images, CT scan images
NOTE Confidence: 0.93918025
00:58:03.200 --> 00:58:04.640 to kind of quickly get
NOTE Confidence: 0.93918025
00:58:04.640 --> 00:58:05.680 to what are the worrisome
NOTE Confidence: 0.93918025
00:58:05.680 --> 00:58:06.800 features, what are the high
NOTE Confidence: 0.93918025
00:58:06.800 --> 00:58:07.920 risk stigma, or are things
NOTE Confidence: 0.93918025
00:58:07.920 --> 00:58:09.280 being missed. And the very
NOTE Confidence: 0.93918025
00:58:09.280 --> 00:58:10.480 kind of scary piece of
NOTE Confidence: 0.93918025
00:58:10.480 --> 00:58:10.980 data
NOTE Confidence: 0.99326676
00:58:11.285 --> 00:58:12.485 about the fact that for
NOTE Confidence: 0.99326676
00:58:12.485 --> 00:58:14.085 some patients who go on
NOTE Confidence: 0.99326676
00:58:14.085 --> 00:58:15.145 to develop cancer,
NOTE Confidence: 0.97265023
00:58:16.005 --> 00:58:16.885 if you go back and
NOTE Confidence: 0.97265023
00:58:16.885 --> 00:58:17.925 use AI to look at
NOTE Confidence: 0.97265023
00:58:17.925 --> 00:58:19.545 their imaging studies with cyst,
NOTE Confidence: 0.97265023

00:58:19.605 --> 00:58:21.125 you know, twelve months, eighteen

NOTE Confidence: 0.97265023

00:58:21.125 --> 00:58:23.145 months before they develop cancer,

NOTE Confidence: 0.97265023

00:58:23.205 --> 00:58:24.325 that there may be signs

NOTE Confidence: 0.97265023

00:58:24.325 --> 00:58:25.365 there. So I I you

NOTE Confidence: 0.97265023

00:58:25.365 --> 00:58:26.730 know, I'm classically

NOTE Confidence: 0.9023137

00:58:28.150 --> 00:58:29.510 a late adopter, but when

NOTE Confidence: 0.9023137

00:58:29.510 --> 00:58:30.390 it comes to stuff like

NOTE Confidence: 0.9023137

00:58:30.390 --> 00:58:31.750 AI, I think there's great

NOTE Confidence: 0.9023137

00:58:31.750 --> 00:58:33.110 potential. And so you'll be

NOTE Confidence: 0.9023137

00:58:33.110 --> 00:58:33.990 seeing a lot more about

NOTE Confidence: 0.9023137

00:58:33.990 --> 00:58:36.090 AI AI and imaging recognition

NOTE Confidence: 0.9023137

00:58:36.310 --> 00:58:37.190 and so on when it

NOTE Confidence: 0.9023137

00:58:37.190 --> 00:58:38.470 comes to the medical system.

NOTE Confidence: 0.9023137

00:58:38.710 --> 00:58:40.310 Topic for for a a

NOTE Confidence: 0.9023137

00:58:40.310 --> 00:58:40.810 future

NOTE Confidence: 0.9591812

00:58:41.635 --> 00:58:43.315 Smilo shares. But I'm gonna

NOTE Confidence: 0.9591812

00:58:43.315 --> 00:58:44.435 have to close this. We're

NOTE Confidence: 0.9591812

00:58:44.435 --> 00:58:45.495 after the hour.

NOTE Confidence: 0.968818

00:58:46.115 --> 00:58:47.395 Thank you all for attending,

NOTE Confidence: 0.968818

00:58:47.395 --> 00:58:48.515 and thank you so much

NOTE Confidence: 0.968818

00:58:48.515 --> 00:58:49.875 for for putting on this

NOTE Confidence: 0.968818

00:58:49.875 --> 00:58:51.415 program. I learned a lot,

NOTE Confidence: 0.9995438

00:58:51.875 --> 00:58:53.415 and take care. Bye bye.

NOTE Confidence: 0.91118175

00:58:53.715 --> 00:58:55.616 K. Thank you. Bye bye.