

WEBVTT

NOTE duration: "00:04:08.405"

NOTE Confidence: 0.9297241

00:00:04.640 --> 00:00:06.960 So ablation is using energy

NOTE Confidence: 0.9297241

00:00:06.960 --> 00:00:08.420 of some form to destroy

NOTE Confidence: 0.95168734

00:00:08.880 --> 00:00:10.639 tissue. In this case, we're

NOTE Confidence: 0.95168734

00:00:10.639 --> 00:00:12.400 talking about prostate ablation, so

NOTE Confidence: 0.95168734

00:00:12.400 --> 00:00:14.080 we use different types of

NOTE Confidence: 0.95168734

00:00:14.080 --> 00:00:16.195 energy. Could be heat, cold.

NOTE Confidence: 0.95168734

00:00:16.195 --> 00:00:17.795 We actually use electricity as

NOTE Confidence: 0.95168734

00:00:17.795 --> 00:00:19.895 well to destroy prostate tissue,

NOTE Confidence: 0.95168734

00:00:19.954 --> 00:00:21.575 usually prostate cancer.

NOTE Confidence: 0.9911133

00:00:21.954 --> 00:00:24.295 Because we use imaging guidance,

NOTE Confidence: 0.9836426

00:00:24.595 --> 00:00:25.954 we're able to place the

NOTE Confidence: 0.9836426

00:00:25.954 --> 00:00:27.570 probes or target the tissue

NOTE Confidence: 0.9845378

00:00:28.130 --> 00:00:29.810 in a very precise manner

NOTE Confidence: 0.9845378

00:00:29.810 --> 00:00:30.310 and

NOTE Confidence: 0.9691162

00:00:30.610 --> 00:00:32.450 destroy only the tumor and
NOTE Confidence: 0.9691162

00:00:32.450 --> 00:00:33.829 the surrounding tissue,
NOTE Confidence: 0.99912107

00:00:34.130 --> 00:00:35.670 but we're able to spare
NOTE Confidence: 0.99957275

00:00:35.970 --> 00:00:37.729 other structures that we don't
NOTE Confidence: 0.99957275

00:00:37.729 --> 00:00:38.629 want to damage.
NOTE Confidence: 0.96990603

00:00:39.170 --> 00:00:41.170 This is in contrast to
NOTE Confidence: 0.96990603

00:00:41.170 --> 00:00:43.475 whole prostate therapies like prostatectomy
NOTE Confidence: 0.96990603

00:00:43.695 --> 00:00:44.735 or surgery where we are
NOTE Confidence: 0.96990603

00:00:44.735 --> 00:00:46.895 removing the entire prostate or
NOTE Confidence: 0.96990603

00:00:46.895 --> 00:00:48.735 radiation therapy which is traditionally
NOTE Confidence: 0.96990603

00:00:48.735 --> 00:00:50.175 done to the entire prostate
NOTE Confidence: 0.96990603

00:00:50.175 --> 00:00:51.375 with a margin of treatment
NOTE Confidence: 0.96990603

00:00:51.375 --> 00:00:52.915 even outside the prostate.
NOTE Confidence: 0.95564777

00:00:53.855 --> 00:00:55.615 So doing a subtotal treatment
NOTE Confidence: 0.95564777

00:00:55.615 --> 00:00:56.575 where we are able to
NOTE Confidence: 0.95564777

00:00:56.575 --> 00:00:57.715 target the

NOTE Confidence: 0.984375
00:00:58.095 --> 00:01:00.079 prostate cancer primarily
NOTE Confidence: 0.9506836
00:01:00.460 --> 00:01:02.059 with a safety margin around
NOTE Confidence: 0.9506836
00:01:02.059 --> 00:01:02.559 that
NOTE Confidence: 0.9576518
00:01:03.020 --> 00:01:05.180 really allows for preservation of
NOTE Confidence: 0.9576518
00:01:05.180 --> 00:01:07.259 function or the least possible
NOTE Confidence: 0.9576518
00:01:07.259 --> 00:01:09.500 damage to a man's urinary
NOTE Confidence: 0.9576518
00:01:09.500 --> 00:01:11.659 function, sexual function, bowel function
NOTE Confidence: 0.9576518
00:01:11.659 --> 00:01:13.155 that we can achieve,
NOTE Confidence: 0.9970703
00:01:13.935 --> 00:01:15.395 with a prostate cancer treatment.
NOTE Confidence: 0.95125324
00:01:19.215 --> 00:01:21.454 The three different technologies that
NOTE Confidence: 0.95125324
00:01:21.454 --> 00:01:23.075 we have currently at Yale
NOTE Confidence: 0.95125324
00:01:23.295 --> 00:01:24.354 are Tulsa,
NOTE Confidence: 0.9995117
00:01:24.655 --> 00:01:25.475 which uses
NOTE Confidence: 0.99794924
00:01:25.935 --> 00:01:28.390 high intensity ultrasound waves. We're
NOTE Confidence: 0.99794924
00:01:28.390 --> 00:01:29.750 able to heat the prostate
NOTE Confidence: 0.99794924

00:01:29.750 --> 00:01:31.770 tissue from the inside out.
NOTE Confidence: 0.9838867

00:01:32.310 --> 00:01:32.810 Cryoablation
NOTE Confidence: 0.9835069

00:01:33.110 --> 00:01:34.149 is sort of the opposite.
NOTE Confidence: 0.9835069

00:01:34.149 --> 00:01:35.770 It uses cold energy
NOTE Confidence: 0.97075194

00:01:36.069 --> 00:01:37.850 to similarly destroy the cells.
NOTE Confidence: 0.9214003

00:01:38.390 --> 00:01:40.805 And then IRE or Irreversible
NOTE Confidence: 0.9214003

00:01:40.865 --> 00:01:41.365 Electroporation
NOTE Confidence: 0.929362

00:01:41.825 --> 00:01:43.905 uses electricity, and it actually
NOTE Confidence: 0.929362

00:01:43.905 --> 00:01:45.825 passes electricity between a couple
NOTE Confidence: 0.929362

00:01:45.825 --> 00:01:46.645 small needles,
NOTE Confidence: 0.99853516

00:01:46.944 --> 00:01:47.685 and that
NOTE Confidence: 0.9779297

00:01:48.065 --> 00:01:49.825 results in cell lysis or
NOTE Confidence: 0.9779297

00:01:49.825 --> 00:01:51.205 the death of the cells.
NOTE Confidence: 0.9386719

00:01:52.385 --> 00:01:54.225 There are highlights to each
NOTE Confidence: 0.9386719

00:01:54.225 --> 00:01:55.550 of these. These. Right? Tulsa
NOTE Confidence: 0.9320183

00:01:56.250 --> 00:01:58.430 probably of any ablation technology

NOTE Confidence: 0.9320183

00:01:58.490 --> 00:02:00.010 out there currently has the

NOTE Confidence: 0.9320183

00:02:00.010 --> 00:02:02.810 best treatment planning, treatment monitoring

NOTE Confidence: 0.9320183

00:02:02.810 --> 00:02:04.350 in real time and ability.

NOTE Confidence: 0.9320183

00:02:04.410 --> 00:02:06.010 To target certain areas of

NOTE Confidence: 0.9320183

00:02:06.010 --> 00:02:07.930 the prostate avoiding damage to

NOTE Confidence: 0.9320183

00:02:07.930 --> 00:02:08.794 other areas,

NOTE Confidence: 0.9980469

00:02:09.255 --> 00:02:11.115 and effectively treat cancer.

NOTE Confidence: 0.9123047

00:02:11.974 --> 00:02:12.474 Cryoablation,

NOTE Confidence: 0.91484374

00:02:12.775 --> 00:02:14.474 we know, is very effective,

NOTE Confidence: 0.99209255

00:02:14.775 --> 00:02:16.294 and it can be used

NOTE Confidence: 0.99209255

00:02:16.294 --> 00:02:18.215 in certain anatomical locations more

NOTE Confidence: 0.99209255

00:02:18.215 --> 00:02:19.735 easily than others and can

NOTE Confidence: 0.99209255

00:02:19.735 --> 00:02:20.555 be done quickly.

NOTE Confidence: 0.9431966

00:02:20.935 --> 00:02:21.780 And then IRE

NOTE Confidence: 0.9945623

00:02:22.580 --> 00:02:23.620 for people that are very

NOTE Confidence: 0.9945623

00:02:23.620 --> 00:02:25.800 concerned about preserving their erectile

NOTE Confidence: 0.9945623

00:02:25.860 --> 00:02:26.360 function,

NOTE Confidence: 0.9990777

00:02:27.060 --> 00:02:28.260 it seems to have the

NOTE Confidence: 0.9990777

00:02:28.260 --> 00:02:29.720 least impact on that.

NOTE Confidence: 0.9969554

00:02:30.100 --> 00:02:30.980 So those are kind of

NOTE Confidence: 0.9969554

00:02:30.980 --> 00:02:33.139 the highlights that allow us

NOTE Confidence: 0.9969554

00:02:33.139 --> 00:02:35.060 to really provide the top

NOTE Confidence: 0.9969554

00:02:35.060 --> 00:02:35.865 level care.

NOTE Confidence: 0.9943305

00:02:37.385 --> 00:02:39.485 At Yale, we understand that

NOTE Confidence: 0.9943305

00:02:39.705 --> 00:02:41.645 prostate cancer treatment options

NOTE Confidence: 0.99943036

00:02:42.025 --> 00:02:43.465 should be individualized to a

NOTE Confidence: 0.99943036

00:02:43.465 --> 00:02:43.965 patient.

NOTE Confidence: 0.9994507

00:02:44.745 --> 00:02:46.585 It's always really important to

NOTE Confidence: 0.9994507

00:02:46.585 --> 00:02:47.645 take into consideration

NOTE Confidence: 0.9891036

00:02:48.500 --> 00:02:49.700 factors that contribute to a

NOTE Confidence: 0.9891036

00:02:49.700 --> 00:02:51.959 patient's prostate cancer risk. But

NOTE Confidence: 0.9891036

00:02:52.180 --> 00:02:53.780 it's also really important to

NOTE Confidence: 0.9891036

00:02:53.780 --> 00:02:55.639 take into account their

NOTE Confidence: 0.994751

00:02:55.940 --> 00:02:56.919 personal preferences,

NOTE Confidence: 0.9427083

00:02:57.380 --> 00:02:58.760 their individual anatomy,

NOTE Confidence: 0.9965123

00:02:59.459 --> 00:03:00.915 and being able to offer

NOTE Confidence: 0.9965123

00:03:01.155 --> 00:03:01.894 this treatment,

NOTE Confidence: 0.99083114

00:03:02.754 --> 00:03:04.775 to patients who have intermediate

NOTE Confidence: 0.99083114

00:03:04.915 --> 00:03:07.094 risk prostate cancer and

NOTE Confidence: 0.9796875

00:03:07.555 --> 00:03:09.555 wish to avoid surgery or

NOTE Confidence: 0.9796875

00:03:09.555 --> 00:03:11.655 radiation, but also are uncomfortable

NOTE Confidence: 1

00:03:12.114 --> 00:03:12.614 with

NOTE Confidence: 0.9626872

00:03:12.915 --> 00:03:14.694 just being on active surveillance

NOTE Confidence: 0.9626872

00:03:14.915 --> 00:03:15.415 alone.

NOTE Confidence: 0.99350876

00:03:15.730 --> 00:03:17.170 This is an important treatment

NOTE Confidence: 0.99350876

00:03:17.170 --> 00:03:18.950 option that fills a gap.

NOTE Confidence: 0.99350876

00:03:19.010 --> 00:03:20.290 We know that ablation therapies
NOTE Confidence: 0.99350876
00:03:20.290 --> 00:03:20.950 are safe.
NOTE Confidence: 0.9932129
00:03:21.970 --> 00:03:23.350 They are not without risks,
NOTE Confidence: 0.9223966
00:03:23.730 --> 00:03:24.930 but they are safe, and
NOTE Confidence: 0.9223966
00:03:24.930 --> 00:03:26.930 on average have fewer side
NOTE Confidence: 0.9223966
00:03:26.930 --> 00:03:27.430 effects
NOTE Confidence: 0.9969799
00:03:27.970 --> 00:03:28.930 than we would see with
NOTE Confidence: 0.9969799
00:03:28.930 --> 00:03:30.390 surgery or see with radiation.
NOTE Confidence: 0.9969799
00:03:30.514 --> 00:03:31.474 We know from a couple
NOTE Confidence: 0.9969799
00:03:31.474 --> 00:03:33.474 of trials that we actually
NOTE Confidence: 0.9969799
00:03:33.474 --> 00:03:34.834 have been involved in here
NOTE Confidence: 0.9969799
00:03:34.834 --> 00:03:35.495 at Yale
NOTE Confidence: 0.90631974
00:03:35.795 --> 00:03:37.474 that this treatment is in
NOTE Confidence: 0.90631974
00:03:37.474 --> 00:03:38.614 fact effective
NOTE Confidence: 0.9938534
00:03:38.915 --> 00:03:40.995 at cancer control and also
NOTE Confidence: 0.9938534
00:03:40.995 --> 00:03:42.930 effective at avoiding or lowering

NOTE Confidence: 0.9938534
00:03:42.930 --> 00:03:44.530 risk of urinary and sexual
NOTE Confidence: 0.9938534
00:03:44.530 --> 00:03:45.270 side effects.
NOTE Confidence: 0.9973958
00:03:45.730 --> 00:03:47.190 I think it provides patients
NOTE Confidence: 0.9973958
00:03:47.330 --> 00:03:47.830 who
NOTE Confidence: 0.9995117
00:03:48.930 --> 00:03:49.830 are motivated
NOTE Confidence: 0.95292157
00:03:50.450 --> 00:03:52.050 to maintain their quality of
NOTE Confidence: 0.95292157
00:03:52.050 --> 00:03:52.550 life,
NOTE Confidence: 0.9877116
00:03:53.489 --> 00:03:55.410 an opportunity to pursue therapies
NOTE Confidence: 0.9877116
00:03:55.410 --> 00:03:56.550 that are not as damaging
NOTE Confidence: 0.9877116
00:03:56.849 --> 00:03:57.975 to their,
NOTE Confidence: 0.9733538
00:03:58.695 --> 00:04:00.215 way of life and often
NOTE Confidence: 0.9733538
00:04:00.215 --> 00:04:01.115 their psychological
NOTE Confidence: 0.99934894
00:04:01.655 --> 00:04:02.555 sense of self.