

WEBVTT

NOTE duration:"00:16:54.6580000"

NOTE language:en-us

NOTE Confidence: 0.937926590442657

00:00:00.020 --> 00:00:19.730 Treatments in all of the aggressive options and who can be spared the toxicity associated with that treatment. So I'm going to go a little bit into history of deescalation of breast cancer treatment. And why that is increasing part of the narrative that we're seeing in breast cancer actual clinical trials.

NOTE Confidence: 0.935515224933624

00:00:21.240 --> 00:00:51.280 So there's got lots of good news in breast cancer, though nobody clearly wants it. But we have tons of new treatment discoveries. We have much higher cure rates than we used to. We have many personalized treatments and we have a longer life expectancy for women who are living with metastatic breast cancer. The bad news is that this has increased the treatment burden for patients who are going through breast cancer treatment. This comes with financial costs.

NOTE Confidence: 0.901405453681946

00:00:51.280 --> 00:01:02.370 Tremendous financial costs as the cost of our drugs in our image. Ingo physical side affects missed work burden on the family and caregivers.

NOTE Confidence: 0.920784592628479

00:01:03.470 --> 00:01:14.320 And what we don't want to do is cure. You of your breast cancer to leave. You lugging a suitcase of side affects an harms to your quality of life as you proceed through life.

NOTE Confidence: 0.928419291973114

00:01:15.070 --> 00:01:34.280 So if you take the here's an example. This is a patient of 45 year old woman who has a 2 centimeter breast cancer. It expresses the estrogen progesterone in her two probe protein. She undergoes a bilateral mastectomy and reconstruction So what treatment will this patient get.

NOTE Confidence: 0.927537024021149

00:01:34.910 --> 00:01:45.900 She would have to be Wonder Woman to endure all of the things that I could offer her that are evidence based so she might need RB offered 20 weeks of chemotherapy.

NOTE Confidence: 0.937462747097015

00:01:46.470 --> 00:01:57.700 2 years of targeted therapy for her, her 2 positive cancer surgery and breast reconstruction. We already said she had that 7 weeks of radiation.

NOTE Confidence: 0.930675446987152

00:01:58.520 --> 00:02:10.300 Ovarian suppression so putting her into menopause prematurely in all the side effects that come with that followed. By 10 years of hormonal modulation, which might be accompanied by joint pain and bone loss.

NOTE Confidence: 0.946178197860718

00:02:11.320 --> 00:02:15.760 So the question is which of these treatments does she actually need.

NOTE Confidence: 0.936704337596893

00:02:16.720 --> 00:02:45.540 And that's where the issue of Deescalation comes in so if the prognosis is good can, we scale back on treatment to minimize toxicity to patients in the burden of treatment that they go through and if we're going to do that? Can we do it safely because we need to know that as we scale back on treatments. We don't increase people's chance of recurrence right. You don't want to do less if it's going to compromise your outcome.

NOTE Confidence: 0.926297545433044

00:02:46.880 --> 00:03:12.230 So clinical trials have led to treatment escalation. I often say to patients when we're proposing a placebo controlled trial right where we're testing a new treatment against the standard of care and the people in the standard of care arm will get everything proven to work. Plus, a placebo. And then the people in the intervention arm get that standard of care plus a new pill.

NOTE Confidence: 0.930995583534241

00:03:12.740 --> 00:03:44.270 And I always say the reason that it's ethical to do a placebo controlled trial is if every time we thought a drug might work without proving it works. If we incorporated that into the standard of care you would be lugged lugging a suitcase full of pills to take every day that ultimately hadn't worked out and so it's critical as we begin to look at this that clinical trials also tell us if we can deescalate without compromising outcomes.

NOTE Confidence: 0.936963796615601

00:03:44.270 --> 00:04:00.600 So we can't just cut back on treatments that we know are essential. We have to know that it's safe to do so. And I'm going to talk to you about some studies or areas of study that have led to significantly reduce toxicity for our patients.

NOTE Confidence: 0.91590678691864

00:04:01.920 --> 00:04:31.940 So 1st I'm going to talk about reducing unnecessary surgery. And I am sure that doctor. Avraham is going to show you much better pictures than these 'cause mine came from Google. But in the old days. It

was believed that breast cancer was localized an doctor hallstead invented a procedure called the radical mastectomy that remove the breast and the pectoralis muscle and left women with horrible morbidity, an they would develop.

NOTE Confidence: 0.926583647727966

00:04:31.940 --> 00:05:03.130 Double lymphoedema incredibly disfiguring surgery. I know it's almost uncomfortable just to look at this picture and the sad part is that these women. Many of them still went on to die of their breast cancer and that was because breast cancer was really a systemic disease. There were microscopic circulating cells and so removing the breast alone wasn't enough. We needed to invent better systemic treatments and that's what gave birth to hormonal modulation and to chemotherapy.

NOTE Confidence: 0.931982338428497

00:05:04.500 --> 00:05:26.070 But people began to ask you know this radical mastectomy doesn't work. Can we do a more modified procedure. An randomized trials showed that you could do a modified radical mastectomy, which was much less disfiguring and actually amenable to breast reconstruction. And so this became the new standard of care.

NOTE Confidence: 0.936046600341797

00:05:27.210 --> 00:05:51.890 Recently, we have developed the nipple, sparing mastectomy where they actually do an incision under the breast leave the nipple, and this isn't for every case because it's not safe in every breast cancer. But for patients who have breast cancers that are in the more peripheral regions of the breast. You can do this and often you can't even tell that the patient underwent a mastectomy or breast reconstruction.

NOTE Confidence: 0.934475719928741

00:05:52.720 --> 00:06:23.050 And finally this is a picture of a lumpectomy and radiation, which is the vast majority of what we do. Today, Doctor Hofstetter alluded to this, but not every patient needs a mastectomy under any circumstance mastectomies don't actually prolong survival. In many situations and many breast cancers can be treated with just a very small incision and this was uh with followed by radiation. You can't just do a lumpectomy without radiation or the risk of recurrence is high in Doctor Knowlton will.

NOTE Confidence: 0.926428258419037

00:06:23.050 --> 00:06:58.060 Address that in her talk, but but we have really minimized the harms associated with her breast cancer surgery. It's still not easy, but really important. So then the question is what about the axillary lymph nodes so historically you would sample the axillary lymph nodes. They were important to understand the risk that the cancer would spread and we call that prognostic but we knew that in taking out lymph nodes. There's a huge amount of Morbidity. It increases the chance of developing lymphoedema down the?

NOTE Confidence: 0.910704433917999

00:06:58.060 --> 00:07:30.010 Line an back when I was training. The standard of care and actually practicing for a number of years was that uhm. So instead of doing these full lymph node dissection's there had been progress and we started doing Sentinel Lymph node dissection's where we would inject a radio tracer. Ana die and just take out the first lymph node that the guy went to draining the breast Anne Anne. We saw back in those days if the Sentinel node was positive.

NOTE Confidence: 0.928615152835846

00:07:30.010 --> 00:07:43.600 You would then go back and do a full axillary dissection and take out all the lymph nodes. But if the Sentinel node was negative again. Clinical trials LED us to this, you could spare women taking out all the extra unnecessary lymph nodes.

NOTE Confidence: 0.924660205841064

00:07:44.160 --> 00:07:58.110 So then we asked the question in seminal trial called the Z 11 trial, whether women who don't have a clinically palpable node, but who get a Sentinel Lymph node dissection.

NOTE Confidence: 0.917808592319489

00:07:58.620 --> 00:08:30.690 And then um it's red microscopically later. If those Sentinel nodes are positive do you still have to go back in an remove all the other lymph nodes and this? Is this is limited not to women who get mastectomy, but women who are having a lumpectomy and radiation an what this very powerful trial showed is that in fact, the rates of local recurrence or actually recurrence were no different in the women who went back and had all the lymph nodes removed.

NOTE Confidence: 0.897870242595673

00:08:30.690 --> 00:08:44.630 So now we can really spare women have microscopically detected Sentinel. Nodes additional lymph node surgery patients who have palpable nodes still need a full lymph node dissection.

NOTE Confidence: 0.941211521625519

00:08:45.510 --> 00:09:16.400 So then I want to talk a little bit about reducing unnecessary chemotherapy. So prior to 2005, so back in the days when I was a fellow we offered chemotherapy to any woman whose cancer was larger than 1 centimeter that was nearly everybody right only the very smallest cancers didn't get offered chemotherapy. But what we saw is that many, many, many women, especially post menopausal women, but women with hormone sensitive breast cancers.

NOTE Confidence: 0.947609066963196

00:09:16.400 --> 00:09:38.600 We're actually likely to do quite well without chemotherapy. And so some very, very smart. Scientists asked the question. How can we tell which cancers are going to be in the 15% of these early stage cancers that do metastasize and spare 85% of women unnecessary chemotherapy.

NOTE Confidence: 0.926418542861938

00:09:39.420 --> 00:09:54.150 And just to take a quick look at chemotherapy. This is a visual representation of multiple regimens that we use and slightly off topic here, but you can see you, you know how many people in the audience have had chemo.

NOTE Confidence: 0.899080097675323

00:09:54.870 --> 00:10:27.780 For a lot of you so you may have had one of these regimens, so the Top regimen is called TC times for you means you come in once every 3 weeks 4 times. The 2nd Regimen is called dose dense AC T. It's literally double the number of treatments. It ends up being 16 weeks on therapy because you're able to give it every 2 weeks and then the final regimen is dose dense AC followed by weekly tax all and I just think this is interesting, so all chemotherapy studies today are built.

NOTE Confidence: 0.931019008159637

00:10:27.810 --> 00:10:59.860 On the backbone of that bottom regimen, which is perceived as a little bit less toxic because it's a lower dose. But if you just visually look at the treatment burden. It is in extra uhm potentially 12 visits to the infusion center or certainly 8 visits if you're comparing the 2 and it's not necessarily more effective so I think that all of these are things that we need to think about when we are customizing treatment to specific patients into individual patients risk.

NOTE Confidence: 0.930393993854523

00:10:59.860 --> 00:11:10.270 And I think that um our job in shared decision. Making is to explain these things to you so understanding that really you don't want any of these in less you absolutely need it.

NOTE Confidence: 0.935141265392303

00:11:12.730 --> 00:11:43.820 These scientists developed the Oncotype DX Assay, So what it did is it looked at twenty one genes that are expressed in breast cancers. Anet figured out which genes were associated with recurrence on hormone therapy alone and they showed that women with low scores were unlikely to get any benefit from chemotherapy or unlikely to have recurrence and they could be safely treated without chemotherapy and women who had high scores.

NOTE Confidence: 0.921543121337891

00:11:43.820 --> 00:12:14.760 Would benefit from chemo very substantially and they were able to look back retrospectively based on? What scores women had and who ended up developing recurrences and so for a number of years women

with low scores got no chemo. Women with high scores were given chemo and we didn't know what to do with women in the middle. Uhm, who had scores in the middle. And so there was another clinical trial called Taylor RX that took the women in that Middle Group.

NOTE Confidence: 0.923310577869415

00:12:14.760 --> 00:12:46.510 And randomized them to receive either chemo or not an this study was presented nationally. It took forever for it to come to come for the study to be completed because the women. Luckily, we're all doing so well. They weren't having enough events and they weren't having enough recurrences, but when was finally enough data to analyze it. We saw that for the vast majority of women especially over age 50 in this middle category. They didn't get a benefit from chemo.

NOTE Confidence: 0.927107632160187

00:12:46.510 --> 00:13:00.730 So some of you, I'm even seeing some in this room may have been in that middle category and gotten chemo back in those days. But if you presented today. You wouldn't women under 50 in this middle age group still may get some benefit from chemo.

NOTE Confidence: 0.947054147720337

00:13:01.520 --> 00:13:20.560 But as a result, if you think about it now, you know a very large percentage of these patients who traditionally have negative lymph nodes who would have been treated with chemo in the past are being spared chemotherapy probably in the range of 70 or even 80% of these patients.

NOTE Confidence: 0.939761579036713

00:13:22.440 --> 00:13:55.630 So now I'm going to talk a little bit about reducing unnecessary radiation again. I am out of my area of expertise doctor. Knowlton is our radiation oncologists, but I think this was another there were multiple studies that looked at whether you could give a higher dose of radiation for a shorter amount of time an whether that would impact the rates of local recurrence in the breast an this is just an example of one study that was published in the New England Journal of Medicine. I think the first one published.

NOTE Confidence: 0.932202339172363

00:13:55.630 --> 00:14:05.440 Christian correct me if I'm wrong came out of Canada was the first one, and then there have been multiple other studies looking at this and what they were really able to show is that?

NOTE Confidence: 0.933601558208466

00:14:06.170 --> 00:14:33.180 A3 to 4 week course of radiation was just as good and even maybe better cosmetic. Lee than a 6 1/2. Week course of radiation. And so that has really become our standard of care for lower risk breast cancers very, very large tumors in multiple positive lymph nodes. Still, sometimes require the full 6, 1/2 weeks of radiation, but we have really made a difference.

NOTE Confidence: 0.910743832588196

00:14:33.780 --> 00:15:06.890 OK, So what does this mean for our patient that I told you before so her cancer was her 2 positive and that essentially means. She is gonna need some form of chemotherapy. If her cancer was heard to negative. We could have sent an alka type and maybe she wouldn't have gotten any but she's going to get maybe 12 weeks of chemo instead of 20 she could have a lumpectomy and Sentinel Lymph node dissection and not a full axillary dissection. An she would've may only need one year of targeted therapy instead of 2.

NOTE Confidence: 0.937512218952179

00:15:06.890 --> 00:15:39.060 Potentially, if her cancer was to disappear after initially starting to get treatment for cancer totally disappeared. She would have such a good prognosis that we could probably get away with 5 years of hormonal modulation potentially consider not doing ovarian suppression, which is the standard of care but for women whose cancers disappear. Their prognosis is so excellent we can consider cutting back on some of these things I mean, she could be treated with 4 weeks of radiation if she had a lumpectomy instead of a mastectomy.

NOTE Confidence: 0.928751170635223

00:15:39.190 --> 00:15:46.820 So essentially the goal is that she can feel like Wonder Woman, but not have to be Wonder Woman to enter all of these treatments.

NOTE Confidence: 0.924665689468384

00:15:48.200 --> 00:16:11.060 So to summarize new treatments have increased cure rates along with that has come an increased treatment burden and deescalation trials are essential to determining when unnecessary toxicity can be avoided so we have a number of deescalation trials open right now one of them is looking at.

NOTE Confidence: 0.924032151699066

00:16:12.340 --> 00:16:43.180 Uh whether radiation can be avoided in patients with Sentinel lymph nodes that are identified, an another trial is actually looking at in women with DCIS, where the prognosis is so excellent and the conversion rate too. Invasive cancer is so minimal can, we get away with not operating at all, and just having the women. Take hormonal modulation. An be followed closely an you know, we have a number of trials looking at different.

NOTE Confidence: 0.922002553939819

00:16:43.180 --> 00:16:50.590 Um chemotherapy regiments again figuring out what can be what can be minimized in certain situations.

NOTE Confidence: 0.871104896068573

00:16:51.830 --> 00:16:54.660 And that this is critical to maintaining both.