

Advances in Treatment of Multiple Myeloma
Webcast
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Introduction

Andrew:

Hello, this is Andrew Schorr. Welcome again to our Patient Power program that we do on mdanderson.org. We put a new program there every two weeks. Thank you for being with us when we meet a new M. D. Anderson expert and always an inspiring patient.

Today we're going to talk about advances in multiple myeloma, and there have been advances. And you're about to meet a man whose local doctors, quite frankly, had given up on him. And he sought out cancer care, as I did, at M. D. Anderson knowing that they were world renowned and that they could help.

And Dan Strickland, you're joining us. You're in Houston today. I know normally you're from San Angelo, Texas, which is about seven hours away. Coming to M. D. Anderson made a big difference for you in that you were diagnosed in a very rare situation, age 39, with multiple myeloma.

Do you think you'd be here today if you had not gone to M. D. Anderson?

Dan:

Oh, I know for a fact that I wouldn't be. The doctors in my home town gave up on me and said there was nothing that they could do. So a friend of my family knew a gentleman who had cancer and went to M. D. Anderson, and he highly recommended them. And so that's how we first knew about M. D. Anderson. And then looking into it we found out that they were at the top of the list worldwide in cancer research and treatment, and that's why we chose to come to M. D. Anderson.

Symptoms of Multiple Myeloma

Andrew:

Well, let's put multiple myeloma in perspective and say, of course, that it is not a common cancer. It's not breast cancer, it's not colon cancer, certainly not lung cancer that the community doctors see, unfortunately, in America today all too often. And so you must have been in a very rare situation, age 39, in San Angelo Texas. What symptoms were you experiencing, Dan?

Dan:

I was experiencing extreme fatigue. I am a computer programmer, and my wife would say that I would come home and it was as if I was digging ditches throughout the whole day instead of sitting behind a computer terminal programming. And so she knew there was something wrong with me. So she wanted me to get an annual checkup just to see if everything was okay. So fatigue was a huge symptom that I had.

Andrew:

Right. And first they thought it was your thyroid, and that would be reasonable if somebody has fatigue. And then they noticed it was your kidneys, but the question was why were your kidneys having a problem? And so my understanding in your case is it was because myeloma was flooding your kidneys with cells that were causing it a problem, right?

Dan:

That's exactly right. I went through a kidney biopsy where they took part of the tissue and analyzed it and it determined that I had the light chain, and so that biopsy was what was the definitive answer that I did have that, as well as there was some tests that they ran that showed that I had an M spike, which pointed toward the multiple myeloma.

What is Multiple Myeloma?

Andrew:

Well, let's meet your doctor, and that's Dr. Michael Wang, assistant professor of medicine at M. D. Anderson in the department of lymphoma and myeloma. He made a big difference for you, Dan, and I know that we'll hear about that as we go.

Dr. Wang, what is multiple myeloma? And then in this case I know often it affects the bones. In Dan's case at a very early age it was affecting his kidneys. So help put all that in perspective for us.

Dr. Wang:

Yes. Andrew, thank you for this wonderful program, and, Dan, thank you for joining the program at such a short notice.

Multiple myeloma is a cancer, is a blood cancer of plasma cells. Plasma cells normally live in the lymph nodes where the myeloma is first contracted. These plasma cells, they like to stay in the microenvironment in the bone marrow. That's the soil; they like to stay there and grow. So the bone marrow is the center part of the bones all over our body, so the multiple myeloma can attack all of the bones of a human body.

So plasma cells make this protein. The protein gets secreted into the blood and part of the protein gets secreted into the urine called the Bence-Jones protein. And

when the plasma cells become myeloma cells they go crazy. They make so much protein, the protein overwhelms the kidney causing the condition called the myeloma kidney, and so the patient will- renal failure is a fatal condition. My beloved patient, Dan, had this when he first showed up at M. D. Anderson. He was on the verge of getting dialysis.

Dan's Treatment Plan

Andrew:

Right. And not long for this world if you didn't intervene. Now, let me ask you about this: So you combined different therapies to help Dan, and also he eventually had a stem cell transplant. So tell us what you were able to do. You can't cure multiple myeloma, but the idea is to knock it back and also with a stem cell transplant restore the immune system as best you can?

Dr. Wang:

First of all, we used a program called bortezomib, thalidomide and dexamethasone. This program at that time was unique to M. D. Anderson. This three-drug combination has the feature of fast working, speed. So for only about two cycles, within two months, the protein was greatly reduced. But of those therapies, those combination therapies, although very fast, are not able to eradicate all of the myeloma cells that hide in the bushes of the bone marrow. So in order to eradicate all those, we do high-dose chemotherapy.

High-dose chemotherapy literally wipes the bone marrow out, not only wiping the myeloma cells—but wiping the normal cells—out so that the patient would not be able to survive. So the stem cell transplant utilizes stem cells collected from the patients prior to this high-dose chemotherapy, and then after the high-dose chemotherapy, while the myeloma cells are being killed, the marrow is repopulated by the stem cells after infusing themselves. High-dose chemotherapy with autologous stem cell transplantation. It is a standard therapy that we practice on every possible patient who's eligible.

Andrew:

Okay. And it made a big difference for you, Dan, correct?

Dan:

Oh, yes, it did. It brought my count down from 7,000 when I arrived here; when I left it was down to in the 80 range. So the stem cell transplant was the icing on the cake for my treatment.

Andrew:

And so they were giving up on you where you lived in Texas, far from M. D. Anderson. Came to M. D. Anderson, had advanced care with Dr. Wang, leading-edge care and, as he said, with a protocol, an approach that they weren't doing anywhere else at that time and it made a big difference. You were able to go back to work, and you've had four years now of living a pretty normal life?

Dan:

Yes, that's true. I was able to go back to work, and now I'm working a full 40-hour week and life is good for me. It has really made a difference going through this treatment. And I think one of the big differences is having a doctor who first of all is not only on the cutting edge and looking to see what clinical trials are out there and looking to see what new types of drugs are out there, but he also is a doctor that loves people. And I think that's one of the big things. He loves not only me but he loves, you know, the caregivers and all of those type people that help support me. And I think that's just all important in finding the right place and the right kind of doctor to have. And M. D. Anderson was it for me.

Progress in Treatment

Andrew:

Well, it was for me too.

Dr. Wang, so in singing your praises, we want to talk about the straight clinical part of it for just a minute. So where are we with multiple myeloma today? We go back a few years, you didn't have a lot to offer people, and now you do. So help us understand how if you can't cure it how you can manage it for many people as a long-term chronic condition.

Dr. Wang:

Multiple myeloma is not curable yet, but we are in the process of curing this disease. We are in the process of curing multiple myeloma, and we're making myeloma history. Before 1969 when Dr. Bergsagel and Dr. Raymond Alexanian, my mentor, before they published their regimen, people with myeloma lived less than a year. After they published, melphalan/prednisone, which became a worldwide standard therapy, the median survival improved from less than a year to three years.

Later, when stem cell transplant was developed by many doctors, including Dr. Barlogie and Dr. Raymond Alexanian here at M. D. Anderson, and together with many, many other colleagues and patients in the world, stem cell transplant further improved through therapy the overall survival to five years.

Now we are in the new era of new agents. The new agents include thalidomide, lenalidomide, bortezomib and liposomal doxorubicin. Those new therapies have consistently showed that the median survival has reached to seven years, the

median. At the last American Society of Hematology annual meeting I presented over 30 years experience from M. D. Anderson. Out of 700 patients newly diagnosed, 146 patients achieved complete remission. When the complete remissions are achieved among these 146 patients the median survival has been prolonged to 11 years.

Andrew:

Wow.

Dr. Wang:

Median means 50 percent on the right side, and long-term survivors is less than that. So myeloma is progressing very fast.

Andrew:

Right. Some of the doctors have said to me the way they look at multiple myeloma now is you're running a marathon. So it would seem to me when somebody comes to you the first time, or wherever they go for the first time, ideally you want to beat the cancer and cure it, of course, you want to knock it back as far as you can, but knowing that you may need further treatment part of it is planning for what treatment do you need today that can make as big a dent in the disease and how does it preserve your ability to have future treatments that would be effective too, right? It's sort of planning the whole trajectory over many years, it would seem.

Dr. Wang:

I totally agree with you, Andrew. And it's the treating strategy or philosophy, if you will, that a doctor when we approach the disease they bring out treatment A, they should have A, B, C, D, E to follow as a strategy. Because, as you mentioned earlier, if we cannot cure myeloma yet we can certainly transform this disease into a chronic, controllable disease. So that we need this many plans and strategies to follow each other for the benefits of the survival of the patient.

Progress in Managing Side Effects

Andrew:

One other thing I want to ask you about, Dr. Wang, related to treatments, and you listed some, is also there's been progress in managing side effects of the disease, for instance medicines for the bone complications of multiple myeloma. You've made a lot of progress there too, right?

Dr. Wang:

Yes, such as the bisphosphates that decrease the bone-related events, that are routinely used for myeloma patients, and Dan is actually getting those. In addition to that, some other therapies, IVIg, in Dan's case prevented him and decreased the frequency of infections after stem cell transplantation. Those are very important as well.

A Different Kind of Care at M. D. Anderson

Andrew:

Well, when I hear about all this, and Dan I want you to weigh in on this, so you get to M. D. Anderson, the latest in science has been brought to bear for you over many years. It would seem hard for the doctors back in your home town or wherever we may come for universally them to keep up on this, yet for you, the patient, you want the latest. What would you say to people who are listening maybe around the world, diagnosed with this disease they never heard of, multiple myeloma, and thinking, well, care is all the same whether it's around the corner or at a major center like M. D. Anderson. Is it the same?

Dan:

It wasn't for me. My primary care physician was excellent. They were very good doctors and I have a very good relationship with my doctor there in San Angelo as far as my primary care physician. But she is also smart enough as a doctor to know that she is not an expert in multiple myeloma. And so our relationship was so good that she said you need to go to M. D. Anderson to get that type of care.

So I think first of all you need to look at convenience. It's convenient to stay in your hometown. It is very convenient. But are you sacrificing years of your life for convenience? In my case, I would have sacrificed three months, I wouldn't have been alive more than three months. But going to M. D. Anderson has extended my life for four years, and I have the rest of my life to look forward to.

But the idea is that you need to get the best care, and that is not always there locally. Especially when you're getting into cancers that are very rare like multiple myeloma you want to get the best care, and for me it wasn't in my local town.

Andrew:

Right. One other point I want to make and then we're going to take a brief break, and the point is, Dr. Wang, you see people and give second opinions as well, right? People come from around the world, correct?

Dr. Wang:

Yes.

Andrew:

Okay. So the point I want to make is if you wherever in the sound of my voice and even if English is not your first language and you're listening far away, what I would urge you to do, and this is what I did for my leukemia, is get a consultation with someone who what I say eats, drinks, and sleeps your illness. Find out who researches it.

Dr. Wang, this is all you do, right? You're devoted to multiple myeloma.

Dr. Wang:

Yes, sir.

Andrew:

Right. So the point is that a consultation with Dr. Wang or someone else that you identify, whether they're at M. D. Anderson or some other major cancer center, is important if we all agree that the field is changing and what's changed may make all the difference for you.

We're going to take a brief break on Patient Power, and when we come back we're going to get into more of the diagnosis and treatment strategies that Dr. Wang can tell us about and also some advice from Dan Strickland for those of you who are diagnosed with it. And also we're going to have a special guest who speaks to us from the caregiver's perspective, too. It's all coming up as we continue on Patient Power right after that.

Personalized Treatment

Andrew:

Welcome back to our second segment of Patient Power on mdanderson.org as we discuss advances in multiple myeloma. And it's really heartwarming to me. First of all, there's a lot of progress going on. A lot of it has been paved--that way has been paved by research over the years at M. D. Anderson, and then today we have with us Dr. Michael Wang who devotes himself in the department of lymphoma and myeloma at M. D. Anderson to moving that forward. And then we heard with his patient, Dan Strickland, who we'll meet again, what a difference it's made for him, that he is with us today. He wasn't sure he would have been otherwise.

Dr. Wang, so people are out there listening. And they say, okay, is all multiple myeloma alike or are there certain tests that you all do at M. D. Anderson and you'd recommend someone have to really know what flavor, if you will, of multiple myeloma they have so that the treatment can be personalized to them?

Dr. Wang:

All multiple myelomas are alike in terms of their nature. They all have a malignancy from plasma cells. But multiple myeloma being a systemic disease, involving the whole body from the very beginning, has many faces. For example, the most common symptoms are pain. And the pain often occurs as back pain and sometimes is pain in the other part of the skeletons. Then the second thing is fatigue, very tired and out of proportion to the regular stresses of our life.

And then the patient could have a hypercalcemia. That means the myeloma is attacking the bones, the bones are made of calcium, calcium gets into the blood, and Dan had this when he came in. And the calcium can make people lethargic, and given, you know, very constipated and renal failure.

And then there's renal failure, such as myeloma kidney, and the patient may just be not urinating as much and they become very swollen. And other patients, they just have a lot of infections, like one or two infections within a month out of ordinary. Those are the most common symptoms of myeloma.

Andrew:

So related to the diagnostic tests, when you see those symptoms and they can present in those different ways, I've heard kappa, light chain, different terms come up. Help us understand, though, where there are different flavors, if you will, of multiple myeloma and whether you might approach it differently.

Dr. Wang:

This nation has a very effective system of doctors. The primary doctors can easily diagnose this with a regular routine blood test. For example, we all know the total blood count, the whole blood count. The CBC is regular. Anywhere in the United States this can be done and the results can turn out within an hour. You can find out whether the patient is anemic or not.

And then the same time, the same testing, called chemistry, can find out whether the calcium is high or not, whether renal function is normal or not or the total protein is high. So the regular doctors in their own laboratories no matter where they are can find out the abnormalities by doing those tests. As you know, a lot of patients rarely have symptoms. Nowadays with our developing of the whole medical care system, a lot of patients go to a physical without any symptoms, their total protein is high, the doctors zero in on that and find out later on the patient has myeloma.

New Medicines and Treatment Options

Andrew:

Okay. So it's not necessarily sophisticated blood tests you need then to see this. So let's talk about the treatments. So you mentioned when you were talking about Dr. Alexanian, Dr. Barlogie about advances in transplant, and now you have all these other therapies as well. And you mentioned thalidomide, but there's also a later stage drug, another IMiD, I think you call them.

Dr. Wang:

Lenalidomide.

Andrew:

Yeah, or Revlimid as well. You mention bortezomib, that's Velcade, and there's others coming, so it seems like these drugs are able to revolutionize what you're able to do with medicines as well.

Dr. Wang:

Exactly.

Andrew:

And where are we with newer medicines as yet? What are you working on at M. D. Anderson? What's in the hopper or combining these for greater effect in clinical trials.

Dr. Wang:

Now, Andrew, you are getting me more and more excited because nowadays there's the collaboration work between the government, industrial, academic and community doctors and patients. So thalidomide was developed into lenalidomide, a second generation of thalidomide. And another generation called pomalidomide, those drugs are being researched. Pomalidomide is not at M. D. Anderson, but another drug, a second generation of bortezomib called carfilzomib is in clinical trials here at M. D. Anderson. And those are exciting because bortezomib is associated with a lot of neuropathy, and Dan has a little bit of that neuropathy, but this carfilzomib does not have that property. So those are exciting medicines.

Andrew:

So bortezomib is in a class of medicines called proteasome inhibitors.

Dr. Wang:

Exactly.

Andrew:

Educate you on that, you can look that up, so that would be a discussion with your doctor whether a proteasome inhibitor might be helpful and then the Revlimid or lenalidomide or others coming on now, you call them for short the IMiDs, right?

Dr. Wang:

Yes.

Andrew:

So that's another bit of the lingo. But the neat thing is that in clinical trials now you're even looking at combining these and so you have a lot of trials going on. That must be exciting for you, Dr. Wang.

Dr. Wang:

Those are the only two trials I mentioned. We have Interleukin-6 antibody. We have heat shock protein inhibitor. We have many others, so it is very exciting.

Stages of Myeloma

Andrew:

We got a couple of e-mails from patients, and I want to fire them off to you really quick. So we talked about the symptoms, all right? But here's sort of a key question that we got and that is if you have no symptoms but, you know, it showed up in your blood, how do you know when you should start treatment?

Dr. Wang:

This is also another area of myeloma. Myeloma actually has three stages. The first stage is called MGUS, which stands for monoclonal gammopathy of unknown significance.

The second stage is myeloma, but it's smoldering. So second stage, smoldering myeloma, does not need immediate therapy. Many studies have been done. If the patient has smoldering myeloma, if you start the therapy too early, you merely give the patient the side effects and do not prolong their survival.

But when the patient develops from smoldering into symptomatic multiple myeloma, that is where immediate therapy is needed. There are clearly defined clinical criteria to decide who has smoldering and who has active myeloma.

Andrew:

Okay. It was Bernadette who wrote in from San Antonio, and she feels fine now. So it may be smoldering for her but you ticked off those symptoms before, and Dan definitely knew he had the fatigue, that's for sure. Right, Dan?

Dan:

That's correct

Andrew:

Yeah. So when it gets to that then you're going to seek care.

Well, let's just say a point about caregivers, because people are not in this alone. So, Dr. Wang, you got to know not just Dan but his wife through these number of years, now. You need a lot of people. What would you say to them, because they may be listening now and they're terrified when they hear of this diagnosis of this fairly rare condition maybe they've never heard of?

A Caregiver's Perspective

Dr. Wang:

Medicine is never a purely medical problem. The model for medicine is a psychological, economical and a social medical system. And our system is that the doctors such as me only deal with the medical issues, but there is a huge point about the social care, especially family care, the caregivers. If it was not for his

wife, no matter what I do, no matter how good our drugs, I'm not sure Dan can survive this well or at all to this point. And not only his wife, his church, his friends who donated the money for him to get a trailer and to live in that trailer so that he is readily accessible to M. D. Anderson. And there are so many heroic and heartwarming actions and facts that I cannot name all. And I also have in my office Mrs. Sue Rule and who is vital to the last moment of the survival to her husband.

Andrew:

Let's meet Mrs. Rule there.

Sue:

Hello.

Andrew:

Hi, Sue. I want to mention who you are. Some people with multiple myeloma, it affects anybody, Geraldine Ferraro, who was a vice presidential candidate, a famous athlete you may know, Mel Stottlemyre, who was a great Yankees pitcher, pitching coach for the Yankees and now I should mention he is going to be the pitching coach in my hometown, for the Seattle Mariners

Sue:

I know. I just read that.

Andrew:

But it doesn't always work out that way. And Sue, your husband, Vern, was a top pitcher for the Houston Astros, and then of course he was a coach for the Cincinnati Reds. And he passed on from myeloma. So we're talking about a lot of progress. It's variable for some people, but yet there's always a caregiver. So for the wives or husbands, the friends of people who are affected by multiple myeloma, what would you say to them?

Sue:

I would say the support system is definitely, and Michael and I have had this conversation, prolongs life. It's definitely something you I don't think can go through alone and survive very well. You really need the support, especially of your main caregiver which in our instance was Vern's wife. But it's 24 hours a day if you are committed to it, and it really helps.

Andrew:

Well, thank you. And I want to thank you for coming by M. D. Anderson, being devoted. I know it's an extraordinary institution devoted to curing, as Dr. Wang was saying, multiple myeloma.

Sue:

It is. It's extraordinary, and it was our one shot at a longer life, and they did everything they could. And that's why I come back and visit Dr. Wang because he's like family. And I thank you for your interest.

Andrew:

Thank you, ma'am.

Sue:

All right.

Dan:

Andrew, my wife too was instrumental in getting me here to M. D. Anderson. And I remember at one point she had three people on the telephone on three different phones getting me all registered and everything here. So the caregivers are just so important to this.

Andrew:

Yes, they are.

And, Dr. Wang, so when we look at this altogether, you're working on this day in, day out in partnership with the patients and their support structure.

Dr. Wang:

Yes.

Looking at the Future: The Possibility to Cure

Andrew:

What do you think we can look forward to? You are hopefully going to be at this a long time. I'd love for you to be able to switch to another area of medicine, say myeloma is all done, I'm going to do something else, but probably you're going to be at it a while. So in your career when you use this word "cure" or you look at newer medicines that can make more of a difference, is this very real? Is this a real hope, do you think? What's your dream, if you will?

Dr. Wang:

My dream is within my career time I will see myeloma cured by the joint effort of patients and all the colleagues from all over the world, the governments, the industry and academies. It's a lifetime opportunity and there is where I can impact on the daily living of patients. Sometimes the oncologist is the only factor, positive factor in the patient's life. You know, their families are great in the help but they just don't have the capacity. Their local doctors are fast in recognizing their limit but then you need that special, special knowledge and experience to make it as hopeful, so international data and daily facts say that it is real that we are in the process of curing this disease, making this disease history.

Andrew:

Amen. Well, Dr. Michael Wang in the lymphoma and myeloma department I want to wish you all the best with your work. I want you to keep my friend Dan and people like him ticking for a long time.

Dan, what would you say? There's somebody out there who is listening who's just diagnosed or a family member like their wife who's proactive as you were or Sue Rule, what would you say to them to give them hope?

Dan:

I would say there is hope out there, that the big C word of cancer is not as scary as it once was and it's due to the work by Dr. Wang and other doctors like him. And I would say seek a specialist in the field of multiple myeloma, because there are great doctors out there that can help them. And I would say seek a specialist, lift it up to God and to really depends on your caregivers for your help.

I'm an independent type of person and I learned that I had to not be as independent. I had to get in a wheelchair. I had to do different things I normally would not have done. And just make sure that you seek a qualified specialist, somebody who specialized in multiple myeloma.

Andrew:

And it makes a difference and it beats the alternative, doesn't it?

Dan:

Yes, yes, for sure. Very much so.

Andrew:

Done that for us. Well, all the best to you, Dan, and your wife.

Dan:

Thank you.

Andrew:

And thanks to your church that supported you, that story about the trailer that Dr. Wang was telling us is very heartwarming, and they deserve a little badge to go with it too.

Dan:

I think they do too.

Andrew:

Thank you so much for being with us.

So this is what we do on Patient Power every two weeks on the M. D. Anderson website. And of course all the replays, all the transcripts are there for you. Tell people you know. It can make a difference for them.

Right after Thanksgiving at the end of November, November 27th, we're going to do our program on advances in the treatment of esophageal cancer. We're going to have with us from M. D. Anderson Dr. Wayne Hofstetter, so tell people about that if that applies to them. Thank you so much. As I always say, knowledge can be the best medicine of all. Thanks for joining us. Andrew Schorr with Patient Power. See you next time.

Please remember the opinions expressed on Patient Power are not necessarily the views of M. D. Anderson Cancer Center, its medical staff or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That's how you'll get care that's most appropriate for you.