

Advances in Treatment of Lymphoma

Webcast

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Dr. Felipe Samaniego

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Being Diagnosed with Lymphoma

Andrew Schorr:

Hello and thanks for joining us one again. I'm Andrew Schorr, broadcasting live from Seattle. We're going to connect you with one of our M. D. Anderson experts down in Houston and one of his patients from Dayton, Texas, just northeast, a little less than an hour from Houston.

We've spoken about people who are doing well and alive today because they got advanced care, sometimes in clinical trials through M. D. Anderson. We want to share those stories with you.

Today we we'll talk about a specific group of cancers called lymphoma. Now, there's Hodgkin's disease, Hodgkin's lymphoma, and non-Hodgkin's lymphoma. Taken together there are about 71,000 new cases of lymphoma diagnosed each year in the United States, and the number has been going up, at least of non-Hodgkin's lymphoma, and we'll learn about why. Sometimes it happens in children. Sometimes it happens in people 40 or above. Sometimes it's people in their 20s.

And that's someone like Mindy Goff, and I want you to meet Mindy now. Mindy is a middle school teacher in Dayton, Texas, at Woodrow Wilson Junior High. She's been teaching for six years, and she teaches English as a second language to students there. And she's before married for just a few years, no children yet, and, as I said, is 28.

But if we go back to December of 2005, Mindy, you weren't feeling well, and I know you were developing some swollen glands in your neck and also maybe a small lump around your collar bone. So you go to the doctor, and what happened there?

Mindy:

Initially I was given antibiotics, and when that didn't work I just knew that something more was wrong. And I went back to the doctor and they did an ultrasound and a CT scan, and within two weeks I was at M. D. Anderson, and I was diagnosed with Hodgkin's lymphoma.

Andrew Schorr:

Oh, my goodness. So okay. We have people listening who may be knowledgeable about it because they've been affected by it personally and so they're listening tonight, at least the word lymphoma. Had you ever heard of this? Did you have a clue what it was, and what was going through your mind?

Mindy:

I had heard of lymphoma and specifically Hodgkin's lymphoma. My mom is a nurse and had worked in an oncologist's office for several years, but I really didn't know anything specific about the disease.

Andrew Schorr:

So my understanding is your primary care doctor who you'd seen referred you to M. D. Anderson down the road, and you went there. And so this is all like Christmas time. What happened starting at New Years?

Lymphoma Treatment

Mindy:

I started chemotherapy two weeks exactly after I had first been to M. D. Anderson. And I had chemotherapy for six months.

Andrew Schorr:

Now, tell us about that. What was that regimen? And when you say over six months was it every couple weeks or how did that work out?

Mindy:

The regimen that I had was called ABVD, and from what I understand that was standard treatment for Hodgkin's lymphoma with a very high successful rate treatment. And I had chemotherapy every other week from the end of December until June, so every two weeks I went for one day and had treatment

Andrew Schorr:

So that went on for a number of months. How are you doing now? What do your latest checkups say, and how often do you go?

One Year Post-Treatment

Mindy:

I'm doing great. The first year after treatment I went every three months, and this past June was one year since I had finished my treatment and everything looked great. So I don't have to go back until December. So I'm very excited.

Andrew Schorr:

Yay. And you and your husband, have you given some thought to having children, and have you found out whether even after all this chemotherapy that you can give it a try?

Mindy:

Yeah. Definitely we've always wanted to have a family, so the doctors I spoke to said that with the treatment I had there would be a good chance that it would not affect my fertility. And recently I had all my hormone levels checked and everything came back great, so there shouldn't be any problem having children when we decide to.

Andrew Schorr:

Cleared for take-off. Well, that's good. Let me ask you this question: M. D. Anderson was down the road but there were a lot of choices, and I know your family and friends really rallied around you. You were referred to M. D. Anderson, did that turn out to be a good choice, do you feel? And how do you feel about the quality of care you got?

Mindy:

I can't imagine having gone anywhere else. I think living in this area, especially, that's the first choice of most people who are diagnosed with cancer is to go to M. D. Anderson. I really don't think I could have had a more wonderful doctor and team of people taking care of me throughout my time there, so I think it was definitely the best choice.

Defining Lymphoma

Andrew Schorr:

Well, you gave me a great intro to introduce your doctor, and that's Dr. Felipe Samaniego. He's an associate professor of medicine at M. D. Anderson and a lymphoma specialist. Dr. Samaniego, thank for joining us today.

Dr. Samaniego:

I'm happy to be here.

Andrew Schorr:

So it must make you feel really good when you have a young woman like this who has her whole life ahead of her, and right now things look really good that the therapies that you chose together seemed to be effective. And I know in Hodgkin's disease, which is, you know, significant disease. We'll get to non-Hodgkin's lymphoma in a minute, which I know is more common, but Hodgkin's, you have a pretty good record of cure, don't you?

Dr. Samaniego:

Treatment of Hodgkin's disease does very well. Most people, over 90% of people will get a remission, just like Mindy, and stay in remission. So compared to other lymphomas we do better in that particular case.

Andrew Schorr:

All right. Let's understand what lymphoma is. Everybody has an idea of what breast cancer is or colon cancer, what are lymphomas broadly, and then help us understand a little bit of these different types.

Dr. Samaniego:

Sure. Well, lymphomas are cancers of the lymph nodes. We all have lymph nodes. These are the organs that swell when you have a throat infection; you get bumps on your neck. Those are your lymph nodes doing the work of fighting an infection. And so occasionally these will grow and persist, and that's when we begin looking for lymphoma. You mentioned that there are 70,000 cases of non-Hodgkin's and Hodgkin's lymphoma every year. This is a cancer that has been largely treatable, and many are cured. For the Hodgkin's lymphoma these are generally younger people, such as Mindy, and they usually present with nodes in the neck, enlarged nodes that don't go away in the neck or in the armpit, and it takes a biopsy of one of these to show us the tissue to determine whether this is lymphoma or another problem.

Andrew Schorr:

Okay. And then with non-Hodgkin's lymphoma, how are we doing there? There are different types, I know, and I hear this term follicular, large cell, not large cell. Help us understand the non-Hodgkin's lymphomas.

Dr. Samaniego:

The field is quickly changing in the terminology we use for non-Hodgkin's lymphoma. Just by the name, everything that's not a Hodgkin's lymphoma will turn out to be, just by definition, a non-Hodgkin's lymphoma. And that's a list of different lymphomas; there are probably over 20 different names. We like to divide them into the indolent lymphomas, slow-growing lymphomas, which include follicular lymphoma, and the other parts are the large-cell lymphomas or fast-growing lymphomas. And among these categories there's many more. The list can be large with over 20 different types of lymphoma.

The reason for the confusion is that our terminology and the names of lymphoma have become more sophisticated. We have better tools to define what a large cell lymphoma is, what a mantle cell lymphoma is and what a follicular lymphoma is. We can now categorize what used to be one group of lymphomas into different types. And that helps us identify a certain trait of a tumor, if you will, and then tell a patient, this is an aggressive lymphoma or not an aggressive lymphoma.

Personalized Care for Lymphoma

Andrew Schorr:

Okay. And then I would think what comes out of that then is more personalized care where you know what approaches may be most effective for that lymphoma subtype.

Dr. Samaniego:

Yes. Exactly. So now when we talk to other doctors across the country, when we specify what type of lymphoma, they know exactly, they can pinpoint what the response rates are for that particular name. So it's very more accurate information. So ten years ago we had indolent lymphoma and large cell. There were only two categories. Now we can have individual names given according to the type of lymphoma and can have better directed therapy for each of those different ones.

Andrew Schorr:

Well, that's exciting. So if you're having better directed therapy with some of these different lymphomas, are people living longer? Are you doing better?

Dr. Samaniego:

Don't know. I think we can do prognosis better. Let me give you an example. When we had the indolent lymphoma category most people would do well, but there was a group within that indolent lymphoma that did not do well. They turned out to be mantle cell lymphoma. Even though it looked like indolent lymphoma under the microscope, this particular lymphoma did worse. So now we take that category out of the indolent lymphoma and have a specialized treatment for mantle cell lymphoma, which is more aggressive. Meanwhile, the prognosis of the rest of the indolent lymphomas all seem to behave in a similar way. We are better able to tailor the therapy for the rest of those that grow slow and then treat the mantle cell lymphomas with more aggressive chemotherapy.

Lymphoma on the Rise

Andrew Schorr:

Now, I know that the non-Hodgkin's lymphoma, I'm still going to call it that, that at least what I think of as non-Hodgkin's lymphoma may be low-grade, that's been increasing. And the question has been are there environmental factors at work? What's the research at M. D. Anderson at this point why that cancer is increasing?

Dr. Samaniego:

We don't know. Most lymphomas do not have a cause. Examples of causes such as Epstein-Barr virus is sometimes present in some of the lymphomas. As you mentioned before, the rates of lymphoma have been increasing in the United States. It has probably doubled in the last 20 or 30 years. There's no real cause

for that increase in lymphoma rates. Some people believe that it's the more prevailing use of fertilizers, pesticides, exposures to these pesticides and so forth, but I don't think we really have a good handle as far as etiology. There are a few rare lymphomas that are caused by viruses, and some of those are studied in our laboratories. But for the vast majority we don't know the cause.

But even if we don't know the cause we can still do empiric trials, meaning doing combination or treatments to direct the therapy and improve therapy without knowing the cause. So that doesn't stop us from trying to identify better treatment programs. And for the ones that do have a cause then we study what is the mechanism of taking a normal cell and transforming into a cancer cell.

Andrew Schorr:

Okay. Well, there's a lot to talk about treatment. People listening saying, Well, I've been diagnosed with lymphoma, what do you have for me. So we're going to get into that and understand all the advances for treatment for different types of lymphoma and the work that goes on at M. D. Anderson. And clinical trials, how you can participate as well. That's as we continue our discussion on Patient Power and visit with Dr. Felipe Samaniego and his patient who's doing very well these days, Mindy, from Dayton Texas. Stay with us. You're listening to Patient Power sponsored by M. D. Anderson Cancer Center. We'll be right back.

New Treatments for Lymphoma

Andrew Schorr:

Thanks for joining us live on mdanderson.org on our bi-weekly patient program, or I could say semi-monthly, but anyway every two weeks on Tuesday evenings. Tell your friends, tell your family, there is nothing like this anywhere in the world. And actually we have some emails from overseas as well. So I hope people are listening. Hopefully my West Coast accent is understandable. I don't have a Texas accent at all, but I'm very grateful to M. D. Anderson because that's where I was in a clinical trial and it made a big difference for me with my leukemia.

Now we're talking about related conditions, lymphoma. We have with us Dr. Felipe Samaniego, who's an associate professor of medicine and a lymphoma specialist. There are about 15 physicians who deal with lymphoma and myeloma also at M. D. Anderson. And we have on Mindy, who's with us too, and we'll be getting back to Mindy from Dayton, Texas in just a few minutes.

Dr. Samaniego, we billed this program as what are the advances in treatment, so I guess the first question is, have there been advances in treatment of lymphomas?

Dr. Samaniego:

Yes, there have been advances in treatment. The last five years we've seen the switch of treatment from using chemotherapy that may damage good and bad cells

to biological therapies, the latter category is largely represented by antibodies that can bind proteins and markers selectively present on tumor cells. By binding on tumor cells they can induce cell suicide or killing of tumor cells. So we're very excited about the panel of different clinical trials that offer antibodies as treatments for patients.

Of course, there are other chemotherapy categories where we're figuring out how cells work, and we're trying to modify the signal of a cell, how the cell communicates, by triggering or tricking the cell to induce suicide. And for that we use compounds such as proteasome inhibitors. You might have heard of Velcade. We also use immune modulators. These are drugs--you might have heard of thalidomide. Thalidomide is an immune modulator. We're using now lenalidomide, an improved hybrid drug that comes from thalidomide. And those drugs modify the milieu or the environment of a tumor cell to make it less attracted for a tumor cell and allows tumor cells to die. We don't know exactly how they work, but these have been very useful medicines.

What is a Monoclonal Antibody?

Andrew Schorr:

You know, I had the monoclonal antibody that was first used in lymphoma for my leukemia in a trial at M. D. Anderson. Rituxan or rituximab. Help us understand what a monoclonal antibody is. And I'm going to give you my kind of a grassroots analogy, and I'll see if you accept it as an associate professor the medicine. And that is, I have a view that it's sort of a cruise missile that has a honing device to the actual cancer cell, and the idea is it can be that sort of smart bomb that goes for that and spares the toxic effects on healthy cells. Am I right? Is that what a monoclonal antibody is, it's kind of a honing device?

Dr. Samaniego:

Yes, that's pretty accurate. That's very accurate. Yes. Monoclonal antibodies are basically proteins we already have, but made available in large quantities that bind to the protein on a tumor cell, so it's very selective. And if you use proteins that are related to the proteins we already have on our body, there's good chances that it will be attracted to only one place and not do damage elsewhere.

My other option is to use combination chemotherapy, the drugs that damage good cells and bad cells. Cancer cells compared to non-tumor cells seem to be less organized, and they will die easier when confronted with chemotherapy. But monoclonal antibodies have very precise landings mostly on tumor cells. Sometimes these markers are shared by non-tumor cells, but they are less abundant; we can monitor the toxicity of these antibodies. But it's been very useful. We have at least eight different monoclonal antibodies available on clinical trials.

Rituxan and Combination Therapy

Andrew Schorr:

Now, Rituxan, of course, was a big breakthrough in what I'll still call non-Hodgkin's lymphoma, and I know people who are alive today where maybe they wouldn't have been doing so well without it, and it certainly made a difference for me with leukemia. Now, that's moved up earlier as a treatment, I know, and it's also combined with some chemotherapy. Like I know there's this regimen, CHOP, around for a long time. You have these acronyms, sort of the alphabet soup of cancer. And you have CHOP-R, and now you also have people getting Rituxan even as sort of a maintenance or repeated therapy and living well. Are you combining Rituxan with some of these other newer agents, or are you finding newer combinations where you can get away from more sort of that shotgun chemotherapy?

Dr. Samaniego:

Yes. In the last ten years the single drug that has improved therapy for lymphoma patients has been Rituxan. Rituxan appears to improve the remission rates of almost all B cell lymphomas. And even some of the Hodgkin's lymphomas, they happen to have a lot of lymphocytes, they have the target, the CD-20 protein. So the single drug that has provided the biggest difference in the last ten years has been Rituxan. Several years ago this department did the pivotal trial that allowed the United States to approve Rituxan for the treatment of lymphoma. That trial was done here at M. D. Anderson.

Rituxan works well in combination with chemotherapy. It works when you use it alone, but the benefits may not be as strong. But if you add it to almost any combinations that are active, it improves the activity of the parental regimen. For example, you mentioned CHOP, CHOP alone compared to CHOP plus Rituxan, the CHOP plus Rituxan almost always will do better. And so now Rituxan is being added to most chemotherapy combinations. You can reuse Rituxan and it will continue to produce tumor regression. You'll still add efficacy. So it's been a very useful drug.

The downside of Rituxan has been very little. It gives you allergic reactions, meaning as you infuse it you may get rashes and fever, but those are infusion-related. There's no long-term toxicity, for example a weakening of the heart. It may take away some lymphocytes you need, because the target for Rituxan, CD20, is also on some lymphocytes also, but we haven't figured out what is the maximum amount of Rituxan that a person can receive.

Andrew Schorr:

Now, what about combining it with some of these other new agents? Like could there be a Rituxan and Velcade or Rituxan and this lenalidomide, I can't say it, but I know it's also called Revlimid. Are you looking at any of those combinations? Where are we with that sort of on the frontier?

Dr. Samaniego:

Yes. In almost every conceivable combination of previously effective therapy, the chemotherapy will work better when Rituxan is added. You mention Revlimid plus Rituxan; we are opening that trial at MD Anderson. It will be available for treatment of indolent lymphoma. And so anybody with indolent lymphoma if they qualify for a clinical trial will be offered the combination, the Rituxan and Revlimid. The common name of Revlimid is lenalidomide.

Andrew Schorr:

I'll have to work on my pronunciations. Now, chemotherapy is not dead, and one of the chemotherapies that's been used widely in cancer is Adriamycin. The breast cancer ladies, and some men, too, call it the red devil, because I know it's red and it can have side effects. But I know at M. D. Anderson you've been working on liposomal drug delivery of Adriamycin. What does that mean, and where does that fit in with what you're trying now in lymphoma treatment?

Dr. Samaniego:

All right. Adriamycin is a compound that has toxicity, to protect against toxicity investigators are packaging the drug in liposomes. Liposomes are lipid envelopes that allow delivery of the medicine at high levels into the tumor area, and avoids delivery of Adriamycin to other parts, such as the heart. You can achieve higher delivery into the tumor site while avoiding some of the toxicity to the heart. We know that individuals who receive Adriamycin in high doses, many years down the line their heart may not work as well. And so we will be avoiding some of the toxicity and perhaps improving response rate by the use of a liposomal form of Adriamycin.

Andrew Schorr:

Okay. Now, one of the things that's been in the news the last, oh, three or four years, Dr. Samaniego, is the idea of a cancer vaccine, and so they're trying this in prostate cancer, breast cancer, but certainly in, at least, in indolent lymphoma. And so we wonder about that. And we actually got a question related to that. This is from Roberta in Phoenix, and she said, "I'm a 53-year-old female newly diagnosed with follicular non-Hodgkin's lymphoma. I'm taking Rituxan and then will begin a vaccine made from my own cells and an immunity booster." She says this is part of a clinical trial. "Please explain to me how the injection of my cells will help fight this cancer."

Maybe that's a good kick-off for our discussion about investigational vaccines.

Lymphoma Vaccines

Dr. Samaniego:

Yes. Vaccines have been used to treat patients with follicular lymphoma. Follicular lymphoma seems to go away when immunity improves, at least by a few observations. So when you have a strong immune system the follicular lymphoma tends to go away. So our department has figured out a way, as well as other centers, that if you vaccinate individuals with proteins from their own tumor, the person's own immune system can make an attack against the tumor proteins. So if you have lymphoma, you develop an immune response against the lymphoma cells. You can get rid of the lymphoma. That has been proven to work.

It has been proven to work for individuals that have follicular lymphoma, after they have been treated with chemotherapy. The original biopsy that was taken before they got chemotherapy is prepared in the special way vaccines are made. Once that patient has gotten a clinical remission after chemotherapy they use the protein that they removed from the original tumor and inject it back into the individual. You wait until you get rid of the tumor because the immune system may not be ready when there is a large tumor burden. So you wait until you get a clinical remission, give them the vaccine with a protein material coming from the lymphoma. and that's an immune response that we think is making people live longer without lymphoma.

This approach has been proven to work through several clinical trials. So what's happening in this department is now we're going on to better generation vaccines, and we've had several clinical trials that have completed at this center using that exact same process.

Andrew Schorr:

Okay. Professor, I want to see if I get it right again. Okay. You're going to agreed me on this one, A through F. Ready? So here's the thing. My understanding of it is when you develop cancer it's your own cells that have gone haywire, reproducing, it's like the copying machine that keeps putting out bad copies and doesn't turn off. They're bad cells, they're immature cells, or just defective cells, and they don't die like other cells would. And so your immune system has let you down, because I guess everyone is developing sort of bad copies but your immune system kind of zaps them and they go away. In a cancer patient the sort of copy machine doesn't turn off.

So the idea of the vaccines, if I've got it right, sir, is that you're saying to the immune system, hey, here's the tumor cells you missed the first time, go get them and don't make the mistake again and have ongoing surveillance. How did I do?

Dr. Samaniego:

That's very good. That's exactly what happens.

Andrew Schorr:

Do I get an A?

Dr. Samaniego:

You get an A.

Andrew Schorr:

Okay. All right. And then one last thing about vaccines is none of these are approved yet, so you've done a lot of research, and these big medical conferences come up and data is presented to the FDA. Have we answered the question yet or do we still have to look at the data to see how effective are they?

Dr. Samaniego:

We have answered the question through several clinical trials that vaccines given in the way we mentioned have improved the remission duration of patients who get it. Current clinical trials are improving the vaccine so that it has a bigger effect. And I think once the NIH, the National Institute of Health, sees the benefits they will then try to figure out a way to produce enough vaccine for vast number of individuals with follicular lymphoma.

Right now it's a very costly and labor-intensive process, because keep in mind every individual that has this follicular lymphoma will have to undergo surgery, remove a piece of the tumor big enough to be used for a vaccine, get the chemotherapy, after the chemotherapy is finished then go through the vaccinations themselves. It takes quite a bit of manpower to do that, and so they've been handling as many patients on trials as can be done now. So I think if the public would just say let's vaccinate everybody that has follicular lymphoma who wants the vaccine. We don't have enough doctors and staff to handle the requests. But we should certainly be asking how we can improve vaccines for lymphoma?

Andrew Schorr:

All right. Thank you for explaining that.

Lots more to come and your questions. You're welcome to give us a call right to So we're going to get to more questions for Dr. Felipe Samaniego, lymphoma specialist at M. D. Anderson. We've got some questions for Mindy as well. We'll be back with more as we continue Patient Power sponsored by M. D. Anderson Cancer Center. Stay with us.

The Future of Lymphoma Treatment

Andrew Schorr:

You know, we have such a great team that does these programs. It's not just me folks. There are lots of people. Jamie is our producer. Jessica is our partner at M. D. Anderson. We have great doctors like Dr. Samaniego and patients like Mindy and me, who want to share our story so that you can get the best care. And we invite your questions as we continue our live webcast tonight world-wide, discussing lymphoma.

So Dr. Samaniego, I've got some other questions for you now. Jerry writes in from Sherman, Texas. He says, "I have NHL, follicular flavor, and I was in a clinical trial for the vaccine, and at the 13th injection one of my lymph nodes started getting larger so I was pulled from the clinical trial. I was told that I was getting the vaccine. I had four treatments then of Rituxan about two years ago before I started the vaccine, and my doctor said just do watch and wait. He said I could do another clinical trial later." So he's now very attentive of what's on the horizon. So Jerry asks you, Doctor, "What types of advances in treatment should lymphoma patients expect in the near future?"

Dr. Samaniego:

All right. Well, he has received the latest available therapy for follicular lymphoma. He got Favrilite, which is the vaccine that's used after chemotherapy to stimulate the immune system to keep lymphoma away. And he's getting Rituxan, which is probably the ideal medicine that can be given alone which will work in follicular lymphoma. So such individuals would be interested in additional monoclonal antibodies if there's a need to treat. The next step is to have a program of regularly scheduled tests to monitor lymphoma. It will be monitored with CAT scans, and if suspect tumor/lymphoma develops, it will undergo a biopsy to document that it's follicular lymphoma and not anything else.

Andrew Schorr:

So you talked about the drugs you're looking at now and combining them in new ways. In the lab with the mice and however else you test it, is there anything, you know, maybe eight, ten years down the road but that you're excited about? I know that a lot of work has to go into it, but if we look a little further out what's showing up there?

Dr. Samaniego:

Yes. There are many categories, different categories of medicines that can be used to modulate cell signaling so that you can push a cell to commit suicide. So there are so-called cell suicide programs that take care of cell death. So we've learned of switches. The new medicines of the future, if you look in a ten-year horizon, will have medicines that will turn on switches that will kill tumor cells selectively. We know that because in the laboratory we're working on those targets presently.

So we're finding out what regulates cell suicide. These are usually receptor proteins that when turned on will induce killing of a cell. So these proteins are selectively present in lymphoma cells. We can potentially use a hypothetical drug to turn on a receptor and kill tumor cells selectively. And that should be a very selective way of killing tumor cells and leaving the rest of the normal cells alone.

Cancer as a Chronic Disease

Andrew Schorr:

Well, that's what we want. Now, it sounds like the medicines you have now for many people in the lymphomas, let's say the ones where you can't really have the response that you had with Mindy, let's say, in her case, Hodgkin's lymphoma, where, oh, you know, it's a cure and she goes on for a long, long time. I have friends who are living with the non-Hodgkin's lymphomas and these newer medicines have made the cancer chronic, haven't they? And every once in a while it kind of rears its head and then you knock it back again, right?

Dr. Samaniego:

You raised an important point, and this relates to indolent lymphomas, follicular lymphoma and marginal zone lymphoma, those are very indolent, slow-growing diseases. Long time ago we had plans to cure individuals and we used intense chemotherapy and made patient toxic, in an attempt to get that last bit of lymphoma. We find that strategy may be not as good as using less toxic chemotherapy, be more selective and only treat lymphoma so that it disappears for a long while. We find we get equal or better results using new low intensity chemotherapy.

We can retreat lymphomas, and do just as well because lymphomas keep responding to new therapies. As long as you can show a response you can control it. So controlling may equate to, may be the same thing as a cure if every time that lymphoma appeared in the future we are confident that we will have an effective therapy that can control it and for intents and purpose will give the same outcome as treatment with curative intent.

Long Term Effects of Treatment

Andrew Schorr:

Okay. Well, I mean, you know, whatever works. I think that's good news, and my friend Tim who I was talking with the other day has been living with lymphoma for 20 years now. And he has his insurance business and he plays golf and he's enjoying life, and every few years he needs treatment and they get newer and better and he's feeling good. So I think that works. And should I need treatment

for my leukemia again, knock it back and, I'd love to see it cured, we all would, and we wish you well with your research in that. But chronic, sort of indolent disease, if it's not affecting us is second best but it's okay.

Let's get to some questions. You know, one of the things that we wonder about and particularly with the chemotherapies and maybe with children, what's the long-term effect. And that's what Carol from College Station, Texas wrote in about. She says, "My son who is now 17 was diagnosed with lymphoma when he was ten, and he was aggressively and successfully treated. Are there any known long-term side effects from the treatment of lymphoma?"

Dr. Samaniego:

It all depends on the chemotherapy that was used for the lymphoma. If this was seven years ago the most common combination chemotherapy used then was the C-H-O-P or CHOP regimen you mentioned earlier. So depending on how the medicines were given, there is some long-term toxicity that we have been trying to avoid. Number one is CHOP has cytoxan, which is an alkylating agent. It can damage DNA of good cells and tumor cells. So, cancers coming from the therapy itself is a problem. About 5 percent of individuals will develop a cancer related to the therapy that was given. And I don't know if that kind of a rate is too much, but it is something that we inform patients about when we give chemotherapy, that some of these are DNA-damaging agents, and you can expect a higher number of cancers related to the therapy.

In CHOP there's also Adriamycin, as I mentioned before. Some of the long-term effects of Adriamycin if given in the doses in the CHOP regimen can cause heart problems. And so that's why when we give chemotherapy we do a heart scan to make sure that the patient does not have an abnormally low heart function to begin with.

Of course, growing individuals will probably have an added hurdle, if you will, because they are growing, and maybe their developmental curve may not be as good as their peers in school because they received chemotherapy that may slow down that growth. Again, that would be depend on the type of chemotherapy that an individual received. We have survivorship clinics here at M.D. Anderson where individuals who have been cured and are being monitored for unique set of problems. Long-term problems in cancer survivors should be monitored in specialty clinics.

What Happens After Treatment?

Andrew Schorr:

Right. Right. You gave me a perfect opening, Doctor, for the plug of the program we did just a couple of weeks ago on September 4th, and the replay is there for you, for all of us, on mdanderson.org/patientpower. Just go to the replays and we did do a program on cancer survivorship and really explore what happens after cancer.

And we got a question about that too, and Mindy maybe you'll have a comment. Trish from Houston wrote in and she said, "I'm finishing chemotherapy next week for Hodgkin's lymphoma, and I have a post-treatment appointment after that. I've been so focused on treatment that I don't know what comes next. What should I be discussing with my oncologist at this appointment?"

Well, Mindy, you had an appointment like that not all that long ago, so how did you get your head on straight after you'd gone through many months of treatment? And what questions did you ask, and what would you recommend to Trish?

Mindy:

I remember that appointment really well. And you're just so happy to hear that, you know, that after finishing chemotherapy that all the tests came back normal. And I talked with Dr. Samaniego about the option of having radiation and some of the long-term effects of the medicines that he described, like Adriamycin. But I remember asking him, Okay, what do I do now after coming here for six months and being monitored so closely. And he said, Just go live your life and we'll see you in three months. And, you know what, I think that it's important after going through cancer treatment just to try to get back to living a normal life and enjoy being healthy and, you know, just be grateful.

Andrew Schorr:

You know, I went through that same feeling. The last thing you want is to be diagnosed with cancer, and then you're in this flurry of activity of treatment. It's the focus of your life and your family's and you get to know the healthcare team, which at M. D. Anderson is a great team, and so many people in cancer treatment around the country and around the world are just very devoted people, and you see them a lot and you're scheduling your next appointment, and then suddenly it's like you're turned loose. And I think now--you go what? Every six months or so?

Mindy:

Yes, now I'm going every six months.

Andrew Schorr:

Yeah, and so do I. And that's what they say, go live your life and don't skin your knees and all these more mundane things, wear your seat belt and get plenty of

sleep and eat your vegetables and all those things. And, happily, that's happening more and more to cancer patients, and certainly it's been happening in lymphoma. But as far as follow-up, I think, it does make sense in the cancer survivorship clinic at M. D. Anderson, or wherever you may be, to monitor different things.

Where are we now, Doctor, with the newer drugs? It sounds like, though, the fear of long-term side effects is diminished with these more targeted therapies.

Why Dr. Samaniego is Optimistic about the Future of Treatment

Dr. Samaniego:

I think there's good reason to be optimistic. One, because you're using biological agents such as Rituxan. That means that we probably will be curing additional patients. We have been doing modifications on how we give the medicine to avoid some of the toxicity. So I think there are reasons to be optimistic about avoiding some of the problems that we had with prior chemotherapy regimens.

And as Mindy mentioned, now with the chemotherapy and doing all the things that we do young women are looking forward to that they can remain fertile even after chemotherapy, and that could not be said over ten years ago. We could not say that because most of the chemotherapy that we used to give would harm the ovaries, would harm the sperm that produced sterility.

Andrew Schorr:

Right. And I think that's what I really appreciate about what's going on in cancer care today. It used to be you just wanted to kill as much of the cancer you could or cut it out now and hope people could live a little while, anyway, and now not only are we looking for longer, healthier lives but we're considering the long-term relayed effects of the treatments you use and considering that so that people truly can have a full life, and I know we're all grateful for that.

We have a number of questions that we've received already via e-mail. We're going to pose those to our guests, and you're welcome to give us a call. The phone number is 1-877-711-5611 or email at patientpower@mdanderson.org. You're listening to Patient Power live on mdanderson.org, and it's of course sponsored by M. D. Anderson Cancer Center. We'll be right back with much more in our discussion of lymphoma. Stay with us.

Andrew Schorr:

We're talking about lymphoma today on Patient Power, but in two weeks we're going to discuss cancer in children and specifically the Children's Cancer Hospital at M. D. Anderson and also an advance in the delivery of medicine for children, aerosol therapy. We're going to have with us Dr. Peter Anderson and we're going to have back a guest we had earlier on Patient Power, Dr. Eugenie Kleinerman. So it will be great to have her back too. She's such a knowledgeable lady, and I know Dr. Anderson is too.

That's what we do, connect you with really highly respected, often world experts who can give you authoritative information. And you hear time after time how committed they are, as the whole M. D. Anderson team is, to your health.

Let's go back to our questions we've been getting, Mindy and Dr. Samaniego. So here's a question, I think you touched on it, on pregnancy, and we had gotten a question from Islam in Azerbaijan, so it sounds like many people will be able to go on now. And if they're younger in their marriage, certainly they can go on and hopefully have children, if that's what they want to do.

Now, let's face it, sometimes the cancer wins. And that's related to a question we got from Allen in Baytown, Texas, and he says, "My wife passed away August of 2005 after we were married for just over a year and a half. She was diagnosed with lymphoma a week to the day after we wed." So, very tragic. "We have a two-year old child." His question is, "Is lymphoma transmittable to children?" So can you catch lymphoma, and can it be hereditary?

Dr. Samaniego:

Lymphoma cannot be passed on to another person by one who has the disease. As far as we know there is no transmission of lymphoma from parents to children. There are causes of lymphoma, such as viruses, but those are uncommon cases. For most lymphomas we don't know the cause.

Marginal B-Cell Lymphoma

Andrew Schorr:

Okay. And here is another question. Melissa from Arlington, Texas says, "I was diagnosed with marginal B-cell lymphoma five years ago. It was localized under the right arm," in her arm pit, "and since then my doctors have done the watch and wait." Some of us patients call it watch and worry. "And seven months ago I started to have pain in the lower pelvic area. I've had a hysterectomy. I've had loose stools as a symptom. Colonoscopy only showed a small polyp. Can my cancer, my marginal cell, B-cell lymphoma, go into my colon? Because the pain is getting worse and I need some answers."

Dr. Samaniego:

It may. Marginal zone lymphoma is a very rare type of lymphoma. The usual place it will appear is in the stomach, and individuals will have problems with their bowels, with diet, and the CAT scan will pick up a thickened part of the stomach. The other part, marginal lymphomas affect the lymph nodes and usually stay in the lymph nodes. Having marginal zone lymphoma in the colon is not a common place for it to present. However, if there's any doubt, she's already done some of the tests to screen, and that is through a colonoscopy. And the other test that can be done is a CAT scan with contrast so that the bowel contents will be outlined with contrast and you can see the thickness of the wall all the way up and down. And so those are the usual tests we would do for monitoring somebody with suspected GI involvement.

Finding an Oncologist

Andrew Schorr:

Okay. Now, Harold from Houston writes, "I was diagnosed with lymphoma. How should I go about finding the best doctor or cancer center?" Now, I'm going to give him an answer, Harold, I'm going to say M. D. Anderson. But wherever you may be in the world, the question is, Dr. Samaniego, how do I know whether the doctor, the center, that I'm taking a look at are up to date in the latest treatments? Because let's face it, not every, not every doctor can keep up with just lymphoma, particularly if they're treating so many other cancers. So you how do you find someone who's really up on that if you've been diagnosed with lymphoma?

Dr. Samaniego:

That's not easy to answer. I think it helps to go to the large centers that treat cancer, the cancer specialty hospitals, because those usually are the places that have the infrastructure to do clinical trials and to have more therapies available. Not only that but you also have more tailored therapies for the particular lymphoma than the smaller centers might have.

Now, as far as finding a physician that you're compatible with and who's up to the latest in treatments, usually the bigger cancer hospitals, all the doctors will be of that caliber. It's a little bit tougher to be more specific than that, but if you follow those guidelines I think most people will be doing well.

Andrew Schorr:

I have a little speech on this I'm going to make just briefly. So I've gone to some of the big cancer meetings that doctors go to, although I'm just a patient. I sort of go as a patient advocate and a reporter. And you see leaders in the field, so many from M. D. Anderson but other big comprehensive cancer centers, and they're up at the podium, and then there may be 800 or a thousand healthcare providers, oncologists from around the world who are in the audience. Well, for me, folks, what I do is I want one of those doctors who's at the podium talking about the

disease that I've been diagnosed with. I want them at least to consult in my case, and I want to consider are they doing research to might give me the possibility of tomorrow's medicine today.

And it sounds like, Dr. Samaniego, certainly M. D. Anderson is a preeminent research institution, and ranked number one by US News and World Report, that you have research in so many cancers, certainly in lymphomas, it would seem to make sense that since things are changing in lymphomas people should at least find out what the clinical trials are at an institution such as yours and have that be considered, whether they might qualify. And then with their doctor or maybe their local oncologists, whoever that may be or one of the folks in your department, whether that's right for them. Does that sound like a good strategy?

Dr. Samaniego:

Yes, it is. In fact many individuals do that. Some individuals do not live near big cities but they have a cancer specialist who sees them near their home. And what usually happens is those individuals see their oncologist near where they live, and they travel to Houston where we would re-evaluate patients. We go through a checklist to assure that everything has been done in the initial evaluation of the patient and discuss treatments with their referring oncologist.

And very often we can say, that can be given treatment back home. Sometimes, there will be times where we offer something that cannot be given at home. It depends on the facts, what kind of cancer you have. Do you have a rare cancer that only M. D. Anderson treats? Do you have the common cancer that can be treated back home? And we'll be very frank with individuals about which one they have and the benefits of being treated here versus back home.

Andrew Schorr:

I went through just that discussion. I live, you know 2,000 miles away way up in the corner of the country in Seattle, but, again, there were no specialists in my leukemia around here, but there were at M. D. Anderson, so it worked out for me. And for you, Mindy, it was down the road, but, as you said, even if it wasn't you'd go there.

So let me ask you as we wrap up, we're just going to go a couple of minutes over. Mindy, so you've taken this cancer as an opportunity to give back.

Mindy:

Right.

Hope For All Foundation

Andrew Schorr:

Tell us just for a minute what you and your husband decided to do, and you how can we partner with you on what you're doing now?

Mindy:

When I was diagnosed we really decided that we weren't going to view this whole experience as something unfortunate that happened to us. Instead, we were going to use it as a way to be able to help other people who were going through the same thing. We started the Hope For All Foundation last year. It's a nonprofit organization that is devoted to raising funds for cancer research, specifically lymphoma, at M. D. Anderson. My husband works in the golf industry, so we have over the past year had two golf tournaments which have been really successful, and we've been able to raise almost \$9,000 for cancer research. And we hope to in the future branch out and be able to give patient education and provide support groups for other people going through cancer treatments. I think that's really important to get that.

Andrew Schorr:

Yeah, it sure is. I want to thank you and your husband Micah for doing this. I know your mom, as you said, had been an oncologist nurse, Kay, and your dad, they've got to be really proud of you. And I know it's great that you're doing so well. What is website?

Mindy:

It is Hopeforallinc.org.

Andrew Schorr:

Okay. Hopeforallinc.org. Okay. I took a look at it and saw there's golf tees on it. I'm going to come down and play golf with you and Micah, okay?

Mindy:

That sounds great.

Andrew Schorr:

Okay. And I'm going to write a check. And I wish you all the best. And I bet your students there at Woodrow Wilson Junior High are lucky to have you. And you have to take a break for your treatment, but you're back, so I wish you a long career in education. And now if your students listen to this webcast they'll know you a little better and understand really how life--you can have bumps along the way but life goes on. We wish you all the best, Mindy.

Mindy:

Thank you. And I'd also like to say, Dr. Samaniego has really been great working with our organization. And this past spring he actually sponsored a science day, and I was able to bring about 30 of my students. And he spoke with them and had other researchers and nurses there, as well, to help educate them about the most current cancer research. And it was just a wonderful opportunity for them. I'd like to thank him for that.

Dr. Samaniego:

You're welcome.

Andrew Schorr:

Well, I can tell, just getting to know you tonight, Dr. Samaniego, you're a great guy and not just from the point of view of science, but you're exemplary, as so many people are at M. D. Anderson, for your commitment to all of us, really, hopefully having an upbeat view of our future and helping bring the science to bear and the art of oncology, as well, and there certainly is that. So thank you so much for being with us, sir. And there is a place on the M. D. Anderson website where people can see whether you've got clinical trials that they should inquire about. Is that right?

Dr. Samaniego:

Yes. They have a website. Search M. D. Anderson clinical trials and Google will take you to [current clinical trials](#). You will have the listing of all the available clinical trials of this department for the different types of lymphoma, and they're listed. It is very useful listing of therapies that we have available in clinical trial.

Andrew Schorr:

Okay. Well, I am going to take a look for my friends. And, unfortunately, lymphomas are increasing so this could show up in the life of people you know. But we've learned a lot now and we can all find that information at mdanderson.org. You can just search on clinical trials.

Thank you so much for being with us, Mindy Goff, from Dayton, Texas. And thank you so much, Dr. Felipe Samaniego for your devotion to us.

This is what we do on Patient Power, and what it comes down to is knowledge can be the best medicine of all. Best to you. Remember, this has been M. D. Anderson sponsoring Patient Power. Thanks for being with us. Take care. We'll 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.