

Mayo Clinic Q & A - Dr. Wendy Sherman - 06 16 21 YouTube Cap...

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SPEAKERS

Dr. Halena Gazelka, Narrator, Dr. Wendy Sherman

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- N** Narrator 00:01
Coming up on Mayo Clinic Q&A,
 - D** Dr. Wendy Sherman 00:03
When it comes to malignant tumors in the brain and spinal cord, it's the most common malignant tumor of the brain. We do see it across all age groups, but it is more common the older you are.
 - N** Narrator 00:13
Glioblastoma is an aggressive type of cancer that can be difficult to remove. Current treatments include surgery, radiation, and chemotherapy. But thanks to research and clinical trials, new therapies are being developed.
 - D** Dr. Wendy Sherman 00:27
We're coming together as a community to treat this. We're getting more patients on trial. We're being smarter about our trials. It's an exciting time for our field, and I'm very hopeful that we're going to make progress on this.

D Dr. Halena Gazelka 00:39

Welcome, everyone to Mayo Clinic Q&A. I'm Dr. Halena Gazelka. The words brain tumor strike fear in just about everyone, and today we are going to learn about one type of brain tumor. Glioblastoma is an aggressive form of cancer that can occur in the brain or the spinal cord. This type of brain tumor forms from cells called astrocytes that support nerve cells. Glioblastoma can occur at any age, but it's more common in older adults. It can cause worsening headaches, nausea, vomiting, and seizures. Glioblastoma, also known as glioblastoma multiforme can be quite difficult to treat. A cure is often not possible, but often management and treatments may slow progression of the cancer and also decrease the side-effects. Here with us to discuss this today is Dr. Wendy Sherman, neurologist at Mayo Clinic. Welcome, Wendy.

D Dr. Wendy Sherman 01:31

Hi, thank you very much for inviting me to be here today.

D Dr. Halena Gazelka 01:34

Well, thank you so much. I'm interested in what we can learn from you today. Tell us a little bit about glioblastoma. How common is it?

D Dr. Wendy Sherman 01:43

You know, it's not very common. When it when it comes to malignant tumors in the brain and spinal cord, it's the most common malignant tumor of the brain. But in comparison to other cancers that are out there, it's pretty rare. I think it's estimated that three out of every 100,000 people are diagnosed with it in the United States each year. So, it's pretty rare. But again, the most common type that we see in the brain that's malignant.

D Dr. Halena Gazelka 02:11

What causes it?

D Dr. Wendy Sherman 02:13

It's a good question. We would love to know that so we can prevent it. There's a lot of research being done to look into it. And we don't know. So, the majority of the time, we have no idea what causes it, I think, in a small percentage less than 5%, it can be associated with some inherited cancer syndromes. But that's pretty rare and in the

majority of times, it's not inherited. And then also pretty rare would be if someone had a really significant radiation exposure as a child, like for example, you had a leukemia, and you had brain radiation, that could put you at higher risk for developing it. But, you know, again, the majority of time, we don't know what causes it.

D Dr. Halena Gazelka 02:52
Are there any other risk factors?

D Dr. Wendy Sherman 02:55
You know, we know it's more common, the older you get, and it's more common in males than females. But beyond that, we don't have a lot to guide us. And we do see it across all age groups, but it is more common, the older you are.

D Dr. Halena Gazelka 03:08
In the interim, I touched on this very briefly, but what are some of the signs and symptoms that would cause someone to be concerned they might have a glioblastoma?

D Dr. Wendy Sherman 03:16
Yeah, I'll probably start out by saying that just a headache is not, you know, I think people worry about that a lot. You know, I have a headache and do I have a brain tumor.

D Dr. Halena Gazelka 03:25
We joke about it all the time.

D Dr. Wendy Sherman 03:27
All the time, right? I know. And as physicians, you know, primary care physicians I'm sure, someone comes in with a headache, you know, you want to make sure you're adequately assessing for that. But headache as the only presenting sign of a tumor, especially a glioblastoma is exceptionally rare. Usually, the symptoms are related to the location in the brain where the tumor is located. So, if the tumor is located in the part of the brain that controls your language, then you might have trouble reading, writing, speaking. You know, if it's in a part of the brain that controls your strength, you might have weakness on one side of the body. It's really dependent on the location and then headache can be a part of that. Also, not the majority of the time, but a smaller percentage of the time people can

present with seizures, but that's not the most common presentation.

D Dr. Halena Gazelka 04:17

So, if an individual and their provider are concerned that this may represent a brain tumor, some signs or symptoms, how do you diagnosis this?

D Dr. Wendy Sherman 04:26

Really, the way to diagnose it is with an MRI of the brain with and without the contrast dye. You know, if you have a normal MRI of the brain with and without contrast, then you don't have this.

D Dr. Halena Gazelka 04:39

How do you treat it once you find it?

D Dr. Wendy Sherman 04:41

It's a good question. So, the first step is what we call maximally safe resection, meaning you take out as much as you can of the tumor safely, you know, trying to leave, you know the person whole, but still trying to get out as much as you can. That's the first step that reduces the pressure, can improve symptoms, and also establishes a diagnosis, you know, tells us for sure, yes, this is a glioblastoma. And then also we take all that tissue from surgery and send it for an enormous amount of tests to learn about the tumor, and what could be driving it to grow. So, that surgery piece is the first step. I was just gonna say I mean, so, and then after surgery, you know, once we know, yes, this is a glioblastoma, standard of care is a combination of radiation and chemotherapy. And the radiation is delivered to where the tumor was, it's not the whole brain, you're not getting radiation to the whole brain, it is to a limited area. And then we give a chemo pill, which is called temozolomide, that, it's nice because it's a pill that you can take at home. You don't have to come in for IV infusions during it. And then once radiation is over, people are maintained on the chemo pill. And then there's also a device that you wear on your head, which may sound very unusual to people.

D Dr. Halena Gazelka 06:02

It does.

D Dr. Wendy Sherman 06:03

I'm sure. It's called tumor treating fields. And essentially, you wear it on your head all day, every day. And it's alternating electric fields. And the way it works is it affects how cancer cells are dividing. So, essentially it pulls them apart, and they divide incorrectly. And the cancer cells recognize that they divided incorrectly, and then they undergo what's called apoptosis, or they kill themselves. So, that you know, all together I know that's a lot that I just threw at you, but you know, that is the standard treatment for this type of cancer.

D Dr. Halena Gazelka 06:40

It does sound intense. Does the treatment that you choose for someone vary based on their age?

D Dr. Wendy Sherman 06:46

You know, it can. I will say, you know, so with the majority of patients get treated like that. We know though, in patients who are older, and you know, that's not a really strict cutoff, you know, maybe 70 and over, but it's not strict, but there are times where we may do a shorter course of radiation, instead of six weeks, we might do three weeks of radiation. There are times we might do radiation alone, or chemo alone. It really depends on that individual, but especially for our older patients, those are some options that we consider.

D Dr. Halena Gazelka 07:20

Now, when you're talking about the surgery earlier and said that you want to reduce how much you remove, obviously, so that you don't remove any good tissue while you're taking the tumor out, I imagine.

D Dr. Wendy Sherman 07:32

That's right. You know, I mean, the idea is to leave the person whole. You know, we want, quality of life is so important with this, right? So, we want to keep your functioning good, you know, that you're speaking, you know, the same, if not better afterwards, that you're moving, you know, hopefully better afterwards, that sort of thing. So, there are a lot of different techniques that can be used at the time of surgery, such as a weight craniotomy, and you know, where you stay awake, and they test you during the surgery. I know that sounds scary, but people really do very well with it. And, you know, it allows them to do testing to make sure that no harm is being caused by surgery. And people come out of surgery doing very well after that.

- D** Dr. Halena Gazelka 08:15
I think it is interesting what you said about improvement after surgery, because sometimes we think about surgery, just so that things don't get worse. But if you remove some of that pressure or mass, people can have improvements in their function even.
- D** Dr. Wendy Sherman 08:27
Absolutely, you know, I mean, these tumors, you know, they cause pressure around them, and that causes some swelling in the brain, and we can give steroids to reduce that swelling. But if you can remove the tumor, the brain is much less irritated, there's less pressure there. And people can absolutely improve afterwards with removing that.
- D** Dr. Halena Gazelka 08:47
So many types of cancer that are more common, have screening tests for them. Are there any screening tests you can do to know if someone might have a glioblastoma or a tendency toward one?
- D** Dr. Wendy Sherman 08:58
Not today? But that's our goal. We're doing a lot of research looking at, you know, are there markers in the blood? You know, are there markers in the urine, spinal fluid? Where can we find some indication that this could be starting to happen in the body? But right now, there's no screening test for this.
- D** Dr. Halena Gazelka 09:18
And so, I guess, logically, the answer to my next question is going to be no, but can you prevent glioblastoma in any way?
- D** Dr. Wendy Sherman 09:26
No, unfortunately, but there are a lot of different people working on that, you know, I mean, a lot of that is early detection, and identifying the causes, why this happens. If we can get through those two milestones, then that's our goal, but we're not there yet.
- D** Dr. Halena Gazelka 09:43
So, in the intro, I talked about how this is a pretty significant tumor. What are the survival

rates like?

D

Dr. Wendy Sherman 09:49

Yeah, I unfortunately, they're nowhere near where we want them to be. You know, on average, you know, people tend to live between a year and a half and two years with this on average. And when you get out to five years, it's between five and 10% of people are alive at five years. So, better than it used to be. But, you know, not acceptable from us, you know, we want our patients to live, and we want to be able to cure this. And that's what a lot of our research is going toward, at this time.

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Dr. Halena Gazelka 10:20

How does the survivorship for glioblastoma differ for those folks than it does for other types of cancers?

D

Dr. Wendy Sherman 10:28

You know, I think we apply the idea of survivorship very differently. You know, and I think because, you know, because most of our patients, you know, unfortunately don't live, you know, beyond two years, you can apply survivorship at a different time where people are still being monitored very closely. And there's still an idea that, you know, we know that there's a very high risk that this tumor is going to regrow, but you're not on treatment. And I think there's survivorship in that period. And then there are those exceptions that are those long-term survivors, I mean, all of us have some, and we celebrate that. And, you know, and it is different, because, you know, once you've had a brain tumor, and you've had surgery in the brain, radiation to the brain, it affects you in a different way than, you know, cancer in the rest of the body. So, you know, people's personalities can be different, and other things, so that survivorship is different in that you may not be the same person you were at the beginning of this, but I think people are trying to do, you know, there's a lot of services to help people adapt to what we call the new normal. And, you know, celebrating what you've achieved, and I think, though, as a field, we need to pay more attention to that, because we are getting more people who are living longer and surviving with this. And so, I think we need to pay more attention to some of those issues that can arise in survivorship.

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Dr. Halena Gazelka 11:56

I can only imagine how terrifying this diagnosis would be. How can patients know that they are receiving not only the right diagnosis, but the right kind of care?



Dr. Wendy Sherman 12:07

You know that it's a terrifying appointment, you know, that appointment when they learn the news, and it's overwhelming, and there's all this information that's thrown at you, and no matter how many family members you bring, it's a lot. You know, I think, you know, different people will approach that in different ways. I think, you know, there's always the option to seek a second opinion. And, you know, some people will do those virtually or not. You know, if there's a question about your pathology, the tissue from your surgery, that can always be reviewed. But I think it's important to have, you know, someone who has seen this diagnosis a lot. Again, it's rare. So, you want to be seen, at least initially in treatment recommended by a center that sees this, that has a neuro oncologist, you know, that really specializes in this to at least get you going on your plan. And then that could be carried out at other centers as well.



Dr. Halena Gazelka 13:05

Does Mayo Clinic offer any clinical trials for patients with glioblastoma?



Dr. Wendy Sherman 13:10

We do. We have several that are open right now. And we have a lot on the horizon. I just had a meeting this morning.



Dr. Halena Gazelka 13:17

Tell us about some of that.



Dr. Wendy Sherman 13:18

Yeah, it's exciting. You know, I, we have so many trials that are in various stages of opening. And I think what's exciting for me is, you know, during my training, a lot of the trials were let's just try a new drug, either pill or IV, and let's just try a new one. Now we're looking at, well, can we deliver the drug to the tumor in a better way? You know, do we inject it at the time of surgery? Do we do something to break up what's called the blood brain barrier that can prevent drugs from getting to the brain and the tumor? You know, there's some different types of radiation that are on the horizon, combining different drugs with radiation, some stem cell work. I mean, it's really exciting I'll tell you. You know, not just as exciting what we're testing. But I'm also excited about how we're designing the trials. So, you know, historically, let's just say you are testing a drug and you give 50 people the drug, and then you give the other 50 people standard of care, and then you

have to wait, you know, three, five years to get those results. We're redesigning our trials now. So, you learn as you go, which is really great. Because if you start to see their signal, I mean, it's just great. It makes sense. And, and we're all thinking, well, why aren't we doing this before? And it makes our statisticians really excited. But it's, you know, if you learn as you go, that it's not helpful, well, you can stop and switch and then you're not exposing people to treatment that's not going to help them. So, I'm excited about how we're designing them and what we're testing as well.



Dr. Halena Gazelka 14:55

How do individuals find out about clinical trials at Mayo that they might be candidates for?



Dr. Wendy Sherman 15:02

So, there's a couple different options. I think the easiest is if you, I mean, you can even Google Mayo clinical trials glioblastoma, but on the website, you'll be able to see all the different trials. And it will tell you, you know, is it open at Jacksonville, Rochester, Arizona, all three. Right now, a lot of our trials are open at all three sites, which is really nice. But that's the easiest place. People can also go through clinicaltrials.gov. But I think that can be a bit overwhelming, and not always up to date. So, if you go directly to Mayo's webpage, you'll see exactly what's open right now. And then there is a number on that webpage, too. And if you call, you'll be set up with the research coordinator. And they can talk to you as well and say, yeah, we have this trial that's open or, you know, we might have some other trials we could consider you for and that can help get people in as well.



Dr. Halena Gazelka 15:54

Wendy, at Mayo we have a real passion to improve equity in health care, as we're aware that there are disparities related to many diseases and their management. Are there any related to a glioblastoma that we should be aware of?



Dr. Wendy Sherman 16:08

You know, unfortunately there are, and I think the biggest disparity is enrollment on clinical trials. You know, and I think part of that is, you know, well, it's complicated as to why that happens. But I think we need to do a better job at enrolling people in the community in our clinical trials, you know, it'll be hopefully better for them if it's a drug that works and better for our science too, to have a more diverse population that we're studying. So, I see right now, that's the biggest disparity that we face.

D Dr. Halena Gazelka 16:40
Yeah. So, we want individuals to know that Mayo Clinic and clinical trials are for them.

D Dr. Wendy Sherman 16:45
Absolutely, yeah, they're for everyone. And they sound intimidating. But I think if people can kind of just meet with, you know, the physician, the research team, they'll really break it down. And it's not as scary, as you know, you think. I think a lot of times, it would be very similar to the treatment you'd get it, might just be switching out a drug. So, oftentimes, it's something that, you know, we guide you through, and sometimes you even get closer attention, you know, because you're being seen more frequently by the research coordinator. And so, it shouldn't be something that people are intimidated by.

D Dr. Halena Gazelka 17:21
Wendy, during COVID we started providing at Mayo many more virtual options for visits and care for patients. Is it possible to have virtual visits in neurology?

D Dr. Wendy Sherman 17:33
It is, and I've loved that we've been able to do that. And it's just been so helpful. And, you know, unfortunately, it took COVID to push us into that. But I think now that we're there, it's helpful for us as the care team and helpful for patients. One of the biggest things that I think has been aided by that is, if patients were diagnosed with a glioblastoma out of state, let's say, and they want to be on a clinical trial, instead of traveling, you know, jumping on an airplane, going to see someone and being told, you know, perhaps maybe you're not eligible. You could be in your home, get on a video visit, get an assessment and find out are you eligible or not? Is it worth it to come down or not? So, I encourage that, and we can always bring you down if it's something you know, that's going to help you. But if we don't, we don't want you to have unnecessary travel.

D Dr. Halena Gazelka 18:25
I love that too. And I think that a lot of patients want another opinion. And sometimes they also want to follow-up with us. And instead of having to have them come all the way back after they've had a consult, many times we can meet with them in their home virtually.

- D** Dr. Wendy Sherman 18:38
That's right. Yeah, that's right. I mean, we have a lot of where we'll meet people initially help you know, confirm the diagnosis, recommend a plan of care, they get the treatment locally, and then they see us with each MRI, and they just have the MRI sent to us, and we do a video visit, show them the MRI and say, yeah, you're on track, things are working, keep going or no, we need to change gears. And I think that's been really nice.
- D** Dr. Halena Gazelka 19:01
That's wonderful. Any last words of wisdom to share with us today, Wendy?
- D** Dr. Wendy Sherman 19:06
No, I think, you know, I think it's an exciting time for glioblastoma. I felt there was a time where this disease was kind of in a rut where we weren't making progress. But I think we're on the verge of finding, I do honestly believe we're on the verge of finding something exciting. When that's going to come, I don't know, but I think people are coming together more. Whereas previously, you know, people were kind of siloed in their institutions. We're coming together as a community to treat this. We're getting more patients on trial. We're being smarter about our trials. I think it's an exciting time for our field, and I'm very hopeful that we're going to make progress on this.
- D** Dr. Halena Gazelka 19:45
I love that you can say it's an exciting time for glioblastoma. That's wonderful. That's positivity.
- D** Dr. Wendy Sherman 19:51
Yeah, I believe it. I think, you know, I have to believe that I have hope. And you know, I have hope day to day in that my patients will do as best as they can with the disease, and we'll get them through it with the support that they need. But I hope that we are going to change this disease. And I think there's a lot of people sharing the same dream. And yeah, I hope that I can be on here again soon and be telling you what progress we've made.
- D** Dr. Halena Gazelka 20:19
Well, I look forward to that. Thanks for being here, Wendy.

D Dr. Wendy Sherman 20:21
Absolutely. Thanks for having me.

D Dr. Halena Gazelka 20:23
Our thanks to Mayo Clinic neurologist, Dr. Wendy Sherman, for being here with us today to talk about glioblastoma multiforme. I hope that you learned something. I know that I did. We wish each of you a very wonderful day.

N Narrator 20:37
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