

Transcript of 4/28/21 SiriusXM Dr. Radio show featuring Dr. Sean McMenomey, NYU, Dr. Colin Driscoll, Mayo Clinic., Dr. William Shapiro, NYU, and American Cochlear Implant Alliance Executive Director Donna Sorkin.

ANNOUNCER: This is SiriusXM Dr. Radio. Now from the heart of the NYU Langone Medical Center, this is the ENT show on Dr. Radio.

Dr. McMenomey: Good Afternoon, everybody. Good Morning to all our friends and listeners out on the West Coast. I am your host, Sean McMenomey, Professor of Otolaryngology, Head and Neck Surgery at NYU, broadcasting from the lobby of NYU. We're going to have a really fun show today. I thank you for all coming along with the journey. Our phone lines are toll free, as always.

Just ways to get a hold of us, we have a Doctor Radio Facebook page. In the first hour we're actually going to be streaming the show, and so if you go to the Doctor Radio Facebook page, you can find out the Link to that to get the livestream of the text. So that's a great option for you. Twitter, we are on Twitter @NYUDocs and @DrSeanMcM if you want to tweet us with questions or comments. Replays, 10:00 p.m. Eastern, Thursday the insomniac special, 4:00 a.m., and Sunday, 2:00 p.m. Eastern time. If you don't have the SiriusXM app, get it and download it, because that leaves you to get outside the house and get outside the car and listen to SiriusXM whenever and wherever you are. And you can listen to the shows on demand on the app, which is great. If it you missed a show, you can get it any time you want. You don't have to wait for those replays that I listed.

You can also go to SiriusXM.com/on demand and do that same thing. We'll give a run down on how the show is going to shake out today. First, I will start with my weekly public service announcement, which is continue to wear masks when it's appropriate. Hand hygiene is still important, as is physical distancing. And then get the vaccine when you can get the vaccine. If you're at all unsure, check in with your primary care doctor to see if you can get it. I will say that Covid rates are going up in some parts of the country and they're going up in younger folks, and that may be due to a couple of things. The older population, a greater percentage has been vaccinated, and I think there is a significant amount of Covid fatigue. But I would disagree with a popular podcaster yesterday who said young, healthy people don't need to get the vaccine. I think that's kind of a selfish way to view the world. You're really not getting the vaccine for you. You are getting it for you, but you're also getting it for everybody around you. So I would urge you to get the vaccine.

So in hour one, going to be an exciting first hour. We're going to talk about cochlear implants and we're going to also discuss them in the context of that movie, the Sound of Metal, and we'll talk about the place where they got things right and some places where they failed. To that end we're going to be joined by three great guests. Dr. William Shapiro, the Lester S. Miller and Kathleen V. Miller Assistant Professor of Otolaryngology Head and Neck Surgery at NYU and supervisor of audiology at the NYU Cochlear Implant Center.

We'll be joined by our buddy, Dr. Colin Driscoll, who is a Professor of Otolaryngology, Head and Neck Surgery, Mayo Clinic in Rochester, Minnesota. And he's the former chair of the board

of the American Cochlear Implant Alliance. And then we will be joined and are joined by Donna Sorkin, who is the Executive Director of the American Cochlear Implant Alliance and a cochlear implant recipient herself. And she'll talk a little bit about her personal experience.

In this first hour we have a lot to cover. We'll talk about cochlear implants. We're going to talk about indications, who's a candidate, maybe some mythbusters, hearing loss prevention, and that ties into the movie. The surgery, what's that like? And the movie kind of got that wrong. The follow-up, the evaluation process, and then maybe we'll finish on future directions.

The American Cochlear Implant Alliance meeting starts today, really probably formally tomorrow, and normally Dr. Shapiro and I would be hosting this at a remote location, wherever the ACI was happening that year, but Bill, we're here this year in New York.

Dr. Shapiro: It's always good to be with you.

Dr. McMenomey: Always good to be with you, no matter where it is. So that meeting this year is, again, happening virtually, and it starts, as I said, tomorrow. And we'll talk about why the ACIA is an important organization.

In hour two, I'll do open phone lines. If there's calls we didn't get to on implants, hearing loss, et cetera, we can clean those up in it that 30 minutes. And then we'll talk about Dr. Lewis Rakelmay, associate professor of speech and language pathology and the Director of Speech and Language Pathology at New York Medical College. So that's a long introduction. But I want to welcome Dr. Shapiro, Dr. Driscoll, and Donna Sorkin. Thanks for joining us. Everybody here? Everybody okay -- Donna Sorkin?

>> Great to be on the show again.

Dr. McMenomey: It's really fun. And I'm glad we're getting to do this virtually since we can't do it in person. So if you are a caller out there and you have hearing loss or want to talk about cochlear implants, that's what we're here for. And again, the toll free number is 877NYUDOCs, (877)698-3627. E-mail us, DOCK@siriusXM.com. So I know we want to talk about the movie, and I thought, one way to jump-start this would be to talk about noise induced hearing loss. It's a real problem. It happens to people every day. But unlike the movie, maybe, Bill, you want to talk about your experience in treating people with noise induced hearing loss. It doesn't really happen that way.

Dr. Shapiro: Well, before we even treat those patients with noise induced hearing loss, we actually talk about hearing conservation.

Dr. McMenomey: Absolutely.

Dr. Shapiro: So there are many ways to stay away from noxious levels of noise. There are things called musician's earplugs. Noise has been an epidemic, not a pandemic, but an epidemic that leads to hearing loss. We're seeing the hearing loss kind of enter the younger ages. So hearing loss is not just in the geriatric population because of noise induced issues. Military, music, factory work, all can reduce someone's hearing. So there are ways to stay out of noisy

situations or protect yourself. But you're right typically, when we see noise induced hearing loss, it's not episodic like I think they showed in the movie. It got better and worse and he couldn't hear and then he could. It's usually a slower progression than that.

Dr. McMenomey: And there's usually time to intervene and counsel and educate patients and families about the danger of excessive decibel exposure, especially long duration to loud things. Especially dangerous.

Colin, maybe get your thought on, other than amplification and/or hearing aids, and or cochlear implants, which we'll talk about, anything out there or anything coming up in the future for us to help medically treat patients with noise induced hearing loss or maybe each better, prevent it?

Dr. Driscoll: Yeah. I sure hope so. I agree it's a real problem, and it's a problem in part because it's so insidious. People don't realize the amount of damage they're causing their hearing, because it's just a little bit each time and over many, many years it manifests itself and then is a real problem. And of course, you can't undo that damage. I mean, there's hope, of course, that we can have medications that either stabilize hearing loss or prevents the damage that noise causes. So maybe there are medications potentially. There are restorative treatments that may become available. Things we might inject into the ear. But by far and away, the best thing to do is prevent the complication in the beginning and wear your ear protection and avoid the loud exposures.

From the movie standpoint, the sudden loss, of course, doesn't fit with the standard noise induced hearing loss that we would see, even from heavy metal Rock 'n' Roll exposure, but there are rare cases of explosive assaults, so whether it's gunfire, sudden loss, or true explosions can lead to permanent, sudden hearing loss.

Dr. McMenomey: And that probably bears at least a minute or two of discussion, which is sudden hearing loss is really a medical emergency. You and I would want to see them in the office and have them see an audiologist and get tested right away. So we know what we're dealing with. Is this a fluid problem? Is it a wax problem? Or is it something more sinister, like an inner ear or sensorineural type hearing loss that really needs potentially immediate intervention.

Dr. Driscoll: Yeah, because that's potentially treatable. Right? We would treat with oral steroids and perhaps even injectable steroids. That early, very early treatment as soon as possible gives the best chance for the ear to actually recover. If you show up four weeks later, there's probably not much we're going to be able to do.

Dr. McMenomey: Yeah. I would argue if you wake up and your hearing in one ear is significantly degraded, that probably the right course of action is not to go to an urgent care center and get a course of amoxicillin and Sudafed. Get into your local ear, nose, and throat doctor and let them evaluate you, do a hearing test so we can really find out what we're dealing with. As Colin said, time is precious here and we maybe lose the opportunity to treat these sudden hearing losses.

Dr. Driscoll: Well, yes. So that gets back to the movie where this young drummer, who actually, I thought, was a great actor, but it was not real life in terms of what we do every day, went to a pharmacist, who was okay, apparently the pharmacist either called a physician or an audiologist and someone tested his hearing. I assume it was an audiologist, which really meant he didn't see a physician and get a medical workup.

Dr. McMenomey: Yeah. So maybe, Donna, this is a good point. Maybe some people don't know about this movie. You want to give, like, a brief kind of overview of what this movie was and then we can delve into more about what they got right? We've already covered a little bit about what they got wrong. Why don't you give us a little bit of an overview.

Donna Sorkin: Sure. So in this film, it's heavy metal, former drug addict, musician, essentially loses his hearing suddenly. And what is done well in the film, and I think this was discussed on the online forums quite extensively, was the way the actor portrayed how fearful he was, how desperate he was to suddenly not be able to hear.

And what was also -- what people who have hearing loss also said about it was the way the sound was portrayed was actually the way people who lost their hearing, usually over time, portrayed it to be. You're hearing something, but you don't hear enough to connect the dots to follow things, and the actor in that film really could barely communicate with people. They were writing things down so he could hear. To me as someone who lost my hearing over time 40 years ago, that emotional turmoil that he was going through really rang true, and the actor did an excellent job on that part of it. In fact, for many people, that was an important part of the film, because it showed what it's like to lose one's hearing, and where do you turn next? And he obviously didn't get very good advice from anybody. He ended up in some sort of a hearing care office. It wasn't clear who they were or what they were, and he was told that the only thing that could help him, and they didn't discuss it, they didn't really do any of the analysis of what happened, any real diagnosis. There was no effort to do some sort of medical treatment, as Dr. Driscoll noted. He was immediately told what could happen, what could help him would be to get a cochlear implant. He was told that it's not covered by health insurance and it would cost between 40 and \$80,000.

So that's where things really started to veer off in if a negative direction for many of us, because that's just false information. A cochlear implant for someone who is an appropriate candidate is covered by almost all health insurance, public or private, Medicare, Medicaid, private insurance, et cetera, all cover for an appropriate candidate. And unfortunately, a lot of people don't move forward with this, because they think it's not covered by health insurance. They're used to paying out of pocket for hearing aids. So they assume that other hearing care, like a cochlear implant, is also not covered. And that's a major reason why people don't move forward.

He then proceeds, at some point, without getting into all the details of the movie, but at some point he proceeds with having the surgery and goes away from that with these unbelievably large surgical scars on both sides. And surgeons who saw the film and saw the surgical scars laughed at it, that it was almost like a comic book. And so that was sort of an amazing thing about it was that the negative tilt that the filmmakers chose to put on the surgery itself.

And then the third thing that made me probably the craziest was the day that he gets activated, that is, they turn the cochlear implant on after he has his surgery, and that's a program that's done with an audiologist, like Dr. Bill Shapiro, and allows somebody to actually hear through the cochlear implant, it's done and finished and the audiologist, such as she was, sends him on his way with no directions, no sense of what will happen over time, no explanation of the kind of support that he will get, and it's just not an accurate portrayal of how the process of treating someone who has a moderate to profound hearing loss with a cochlear implant works in the real world. And the support that someone gets and needs for family support, ongoing support from the cochlear implant center where everyone is treated.

So there's a lot of discussion on this film in the community of people who have or provide cochlear implants, and I think those are three of the main things that people mention about the film, the very negative slap that the filmmakers gave to cochlear implants. And instead, were really quite strongly looking at the other option of somebody using sign language without sound. And the reality is it's not either/or. People are -- some people use sign language with their cochlear implant. Some people decide they're going to use the cochlear implant or continue to use hearing aids. Sometimes they use sign language. And people like myself who grew up with hearing and live entirely in the hearing world and never learned sign language, and I'm talking on the phone today with Dr. McMenomey and others, I don't have any intention of learning sign. And I'm probably typical of the population, but the point is the population of people who are deaf is very diverse and we don't fit in one box or another. We're all over the place. And unfortunately, this film doesn't show that aspect of hearing loss and deafness.

Dr. McMenomey: Right. It's not an either/or choice. It's oftentimes you can have both. And I think I'm not a movie maker, surprise, surprise, but I guess this was all the inaccuracies, I guess, were done for dramatic effect. It was much more dramatic if you have a character forced to sell his house to pay for an implant than if what happens normally, which is their insurance covers it. And I guess to make sure you know that they had surgery, you have these kind of exaggerated incisions. I saw a patient back in the office this morning that I had operated on last week, and I'm sure Colin can tell the same story, and so could people from around the country, you can't even -- I couldn't even see the incision a week out. So it's not like it was portrayed in the movie at all.

Donna Sorkin: Right. And you know, I think the other frustration, it's the low utilization of cochlear implants because of misinformation, because of the fact that people have this perception, which continues because of social media, because of the feelings of some people that it's not such a bad thing not to be able to hear, it's not something that needs to be able to be fixed. And because you have a film like this that puts out information that's false, you know, some of the discussions that were on social media were really interesting to me. Some people said, hey, you know, it's drama. It's not a documentary. Why does it matter that they weren't accurate in their portrayal and their representation of the facts? I disagree. You know, I think unfortunately, people get their information from film, from social media, that's been shown over the past couple of years, and there's a lot of wrong information out there.

So when a film like this, that gets nominated for six Oscars for the acting in most instances, was just superlative, it just leads people down the wrong path and continues this problem that we have of only reaching about 6 to 10% of the individuals in this country that could benefit from

what is an unbelievable innovation. From my perspective as a recipient, who has enjoyed this innovation and experienced firsthand the improvements that have gone on and the way that we deliver sound to somebody who is deaf, it is just life changing -- we say that and it sounds trite, but it's just so true. And it pains me that we have films coming out like this that people are watching and coming away from and then not pursuing something that can really, really help them live a richer life, a more fulfilling life and be able to take advantage of opportunities that they would otherwise not have available.

Dr. McMenemy: Well, yeah. I would agree. I think we can do without the fear mongering about such an important topic as this. Maybe one little bit of good news is nobody watches the Oscars anymore, so nobody even knows. Hopefully you're listening to this show, and this show is the ENT show. I'm Dr. Sean McMenemy, joined by Dr. Driscoll, Dr. Shapiro, Donna Sorkin, three experts on cochlear implants. Call us and maybe you or a loved one is struggling with hearing aids. Has a question about cochlear implants. You can give us a call now at those numbers, 87876983627 or shoot me an e-mail, docs@sirius xm.com.
Doctor Shapiro?

Dr. Shapiro: I think Donna did a great job of summarizing all of the inadequacies of the movie. Of course, it was nominated for an academy award, because it was a nice movie. One of the things that bothered me is the audiologists at NYU spend probably 60 percent of their day evaluating patients. They really did short shrift in terms of evaluation. Apparently it was an audiologist that told the patient that they had 20 to 30% discrimination or understanding. Really didn't even think about putting a hearing aid on a patient. Now, probably a hearing aid would not have been terribly beneficial, but that's absolutely part of the protocol, to make sure you're doing the right thing for the patient. So that patient should have been evaluated with a hearing aid in the hopes that maybe their speech discrimination would be better. Probably still a cochlear implant candidate, but that is part of our protocol in every cochlear implant center's protocol is to try a hearing aid on a patient, either at the evaluation or for a week or two, depending on how much benefit they're getting.

And the other point, and Donna mentioned this, because the penetration rate is so low, now we're getting patients be who are coming in, seeing the movie, and asking those questions about why is the scar so big? Is this how it's going to sound? How come you're testing me with a hearing aid? So that's been a little bit difficult for us to overcome. Counseling is critical. Counseling is done by every member of the team. And we see a patient to talk about expectations is important. Rehabilitation is critical. All of our patients, whether they're adults or kids, enter into auditory training program to help strengthen their ability to hear. It's like going to the gym and having a trainer. If you go to the gym and have a trainer, you will work a little bit harder. So we think and we know that our speech and language pathologist who does the auditory training is really very critical to the process.

Dr. McMenemy: Absolutely. And I did want to take this opportunity to thank the American Cochlear Implant Alliance for doing the live captioning on our Dr. Radio Twitter and Facebook pages right now. If you want that, then it's available for you out there. Colin, maybe you can speak to the surgical experiences maybe now and contrast that with when you and I were young doctors and what it was like then. I can tell you, it's a world of difference. Right?

Dr. Driscoll: Yeah. I think the whole area has evolved over many years, and we've been through a lot of it. And in the beginning, it was -- I think all the steps were more complicated. The evaluations were more complicated. The time spent with people to try to figure out if they were an implant candidate or not or whether they should go ahead or not was all more drawn out. And the decisions, in some ways, were much more emotional, I think. And it's not that they're still not emotional at times, but it's become just a very routine process. And from a surgical standpoint, it's really pretty easy to determine whether somebody is a candidate and whether they're going to do better with their implant than they do with their current hearing aid. From a surgical standpoint, we used to do one cochlear implant surgery in it a day or two, and the surgical times, 20 or 30 years ago, was four hours or three or four hours for an implant.

Dr. McMenomey: Per side.

Dr. Driscoll: Per side. And now it's, for most of us, it's an hour, even less than an hour. And it's a routine outpatient operation with extremely low risk. It's one of the most common operations we do. And you mentioned the incision is small. It's behind the ear. Every surgery is a serious undertaking. Every surgery has risks. It's scary to put yourself, you know, allow yourself to be put to sleep and undergo a surgical procedure, but this has become extremely routine and predictable, I think. And people fear it, but the outcome from the implant from a hearing standpoint is so life altering for people that I just don't think surgery should ever stand in the way of proceeding with an implant.

You know, the interesting -- we're all used to movies portraying medical things erroneously, and for the most part, it's not that big a deal. It's sort of irritating, but it's not harmful. I agree with Donna that some of the things in this particular film are potentially harmful. And it's a very passionate field, so getting it right or at least closer to right would have been beneficial. And unfortunately, most of the people we see, their stories aren't going to make a good movie. Right? It's just people have lost their hearing for a myriad of reasons. We go ahead with a cochlear implant and they basically just go back and resume normal or near normal lives. And it's not made for TV shows. It's just real life, though.

Dr. McMenomey: Yeah. I watched one episode of Gray's Anatomy with my daughter years ago and there was an OB doctor in the ER doing open heart surgery in the emergency room. And I just said, this is just so ridiculous. You don't go to Hollywood to get your medical facts and medical information, and I think this is an example of that. This is all for dramatic effect, but it created some harm, because people, imagine if you thought you really had to sell your home to get a cochlear implant or cochlear implants? Imagine that.

Dr. Shapiro: You said his home was a mobile home. Maybe it wasn't as bad.

Dr. McMenomey: I don't know. That's pretty bad if it's where you live.

Donna Sorkin: The film was made for -- it's available on Amazon Prime, so it hasn't ever -- I don't think it's shown in a movie theater. You know, I think it's been seen by a lot of people, which is part of the concern that we have. We did interact with the filmmakers initially just about

the insurance piece. And to me, the amount of research they obviously did, both about the despair that Ruben, the main character, went through when he lost his hearing, the sound effects, which they actually won an Oscar for the sound effects, which are very well done, and even the activation, which for some people rang true, there's no way they didn't know that insurance covers it. I interacted with him and he basically wouldn't comment one way or the other.

You know, I really feel that part of this, you know, in the film was designed to cast a negative slant on cochlear implants. And we can go into the whole aspect of the film, but the character is in a community of people who were drug addicts and are deaf. And there's a school that's attached to it as well and everyone there is part of what we call Deaf culture, which means they don't feel that their deafness is anything that needs to be fixed. And I've -- I can't criticize others' choices if that's what someone chooses and that's the right choice for them, just as this intervention is the right choice for me. Just as someone who decides to use sign language and get a cochlear implant is the right choice for them. So I'm not being judgmental. But the whole concept that somebody who had grown up with hearing and suddenly lost their hearing and then gets a cochlear implant would suddenly switch over and be part of deaf culture doesn't make much sense. And that's just in the real world, that's not the way it works.

Dr. McMenomey: Right.

Donna Sorkin: It was film and it was done that way, but the acting is so, so excellent and it's an entertaining film, anybody that's seen it said it was very entertaining, even if it all the inaccuracies make you crazy.

Dr. McMenomey: Yeah.

Donna Sorkin: But it just contributes to the confusion about deafness in our country, more in the U.S. than in other parts of the world. You don't see this thing going on in other parts of the world as we have in the U.S. And it's part of what we work on as an organization, at the American Cochlear Implant Alliance, to ensure that people have information to make informed decisions. And that's the case, we're talking mostly about adults right now, because that's what the film was about, but in reality, the information is often very poor for parents. And for children who are born deaf or have progressive hearing loss, it's critical that families know that they have this option and that the technology works extraordinarily well and works best in children who are implanted early and have appropriate follow-up rehabilitation and appropriate support and training. So that's the other part of what we work on at American Cochlear Implant Alliance, providing that information to families is also critical.

Dr. McMenomey: Right.

Donna Sorkin: That might be something else we might like to talk about today, because in fact, our utilization rates for children are a good bit higher than they are for adults in our country right now. There are about 60 percent of children who could benefit from a cochlear implant have one. So that's better than the adult side, but I do have to say that in countries of Europe that have advanced healthcare systems, like the U.K., for example, Belgium, Scandinavia, et cetera, that percentage for children is like 90%. And it's because the information that's provided to families under the early intervention system about what their options are when a child is identified is

much more comprehensive. The CI is part of the discussion. A family knows that's in front of them and they can decide if that's what they want to pursue or not.

Dr. McMenomey: Right. A lot of what we do, as Dr. Shapiro said, is spent on education. If you're just joining us, this is the ENT show and we're talking about cochlear implants with Dr. William Shapiro, Dr. Colin Driscoll, and Donna Sorkin, Executive Director of the American Cochlear Implant Alliance. We are taking your calls, 877NYUDOCS. 87769836276789 if you're on hold, stay there. I am going to take a short break. We'll be back shortly. Stay tuned.

[BREAK]

Dr. McMenomey: Welcome back, everybody. Here I am doing it again, talking over the stones, which is never a good thing. It does not let me sleep at night very easily, I will tell you that. Welcome back to the ENT show. I'm your host, Dr. Colin Driscoll, Dr. Shapiro, and Donna Sorkin, executive director of the American Cochlear Implant Alliance. We're talking cochlear implant and taking your calls, (877)698-3627. You can shoot me an e-mail. DOCS@siriusXM.com. If you don't get through in this half hour, top of the hour, I'll open it up to open phone lines and we can continue the conversation.

So let's say hello to Kelly from Des Moines, Iowa. Kelly, welcome to the ENT show.

Caller: Hi. Thanks for taking my call. Can you hear me?

Dr. McMenomey: We sure can.

Caller: I'm sorry. I just had a quick question. I had a significant sudden hearing loss in my right ear a number of years ago. And I think it's become progressively worse and it's to the point where if I try to talk on the phone in that ear, I just hear, like, distorted noise. I can't pick up on any words. So I guess my question is I was considering a hearing aid, but is that going to just amplify the sound I can't already hear or what I'm hearing, like what I was just saying, when I use the phone or would an implant be better? Is an implant something they do for one ear or does it have to be for hearing loss in both ears? Those are my questions.

Dr. McMenomey: All right. So this is a good question. Your hearing in the other ear is normal or near normal?

Caller: I would say near normal for my age. I'm 62.

Dr. McMenomey: And how many years ago did you lose the hearing?

Caller: At least ten.

Dr. McMenomey: Okay. Maybe what we'll do is we'll have Bill talk to you about -- Dr. Shapiro can talk to you about the hearing aid options and Dr. Driscoll, you can talk to Kelly maybe about how you'd counsel her in our office about some of the surgical options and his Bill can chime in on that as well.

Dr. Shapiro: The first thing we would want to do about the right ear, is it aid-able? I would say see your local audiologist. There are many, we can give you the name of someone to see actually. Get that hearing tested. Know exactly what your hearing loss is all about. Then we can make a decisions as to whether we need to aid that ear. In other words, is the right ear aid-able or not? What's the speech understanding on that side? So once we get that figured out, if it you really have no real functionality on that right side, what we might do is consider what's called a cross hearing aids or a bone anchored hearing aid. And those are treatments where we take the sound from your off side, your right ear, and we send the sound into your better ear, your left ear. So you're able to hear from all around, but you're hearing only in that left side. So there are surgical -- there are a hearing aid treatments that involve no surgery, and then there's the bone anchored hearing aids that do involve the surgery. And then we can have Dr. Driscoll talk about if the hearing aids are not helpful, can a cochlear implant help.

Dr. Driscoll: Yeah. So really appropriate question. And two things. First of all, step back and say, well why are you losing hearing in your ear? That's not right. We have to investigate that. So that involves probably just an exam and then usually an MRI scan to make sure there's nothing, hearing imbalance nerves that might be causing the hearing loss. Most commonly that's an acoustic neuroma or vestibular schwannoma. It sounded like you were having hearing loss and it was getting progressively worse, so that usually means we're conducting an MRI scan. And then from a hearing standpoint, if it you really don't gain back from a hearing aid or cros aid, it's impacting your day-to-day life more and more, we are implanting more people with what we would call single-sided deafness. It doesn't fit under some insurance criteria, but surprisingly it's been covered quite regularly. And the goal of that is, of course, to restore hearing in your, basically, nonfunctioning ear. We started doing this more regularly maybe four or five years ago. I really didn't think a lot of people would like the cochlear implant, because we're asking a lot of it. We're asking that implant to provide enough value to complement your other, basically, normal ear. And I honestly have been quite surprised at how many people really find significant benefit in an implant, even though their other ear is normal or near normal. So really important to get an evaluation and figure out why you're losing hearing in that ear, and then talk about those options for treatment.

Dr. McMenomey: And you want to go somewhere that has the openings to offer you, so I think that's really important. And Iowa is obviously pretty close by, so that's a great choice for you. And it's proximate and they obviously have all the options available to them, so I think that's important for you.

Colin, do you have any thoughts or Bill, any thoughts on Kelly's duration of deafness on that ear, a bit controversial maybe?

Dr. Shapiro: I would just back up a little bit. We've implanted many adults and a number of children who are single-sided deaf, and the issue is all of our adults who we've implanted were hearing. They were hearing up until maybe our greatest length of deafness was a little over ten years. And length of deafness we think is really directly related to someone's performance. So if someone came in and at 20 or 30 years of profound deafness, in your case in the right ear, I

would probably say a cochlear implant is not for you. But with ten years or so or less than ten years of deafness, you may want to talk about the imaging, Sean?

Dr. McMenomey: Colin brought up the MRI. We want to make sure that the anatomy is suitable, you know, to have a cochlear implant, Kelly, I guess we should back up, to have a cochlear implant, you have to have a cochlea and you have to have a nerve that connects the cochlea to the brain. And if you have both of those, you are potentially a cochlear implant candidate. But imaging is going to let us understand your anatomy and make sure you don't have anything else going on, as Colin said, from a pathologic standpoint, like a tumor or something else like that. So that's why these workups are important.

Dr. Shapiro: Adults do well with cochlear implants. We do implant children as well. Sometimes these are a bit of a mixed bag. These are kids who may have been born, as Sean says, with a cochlea that's malformed or a nerve that's not completely formed, and so that may be the reason they're not hearing well, and they may not perform quite as well as someone who has this sudden idiopathic sensorineural hearing loss.

Dr. Driscoll: I would like to follow up on your comment, Bill, about duration of deafness. There's some evidence that when you have single-sided deafness, getting good hearing in one ear is enough to basically preserve the hearing pathways, and then we can wake up ears that have been -- or have a significant amount of hearing loss for much longer lengths of time. And we just published a paper on the subject. And so traditionally, we've really been concerned about implanting people that have been deaf in both ears for 30 or 40 years, because maybe we're not going to get very much, just because it's been so long. And frankly, the outcomes are quite variable. You get pretty good results. Sometimes they're not so good results. But we might have more leeway in single-sided deafness, and especially it sounds like with Kelly, she's had a progressive hearing loss over the last ten years. So I would anticipate a pretty good result.

Dr. McMenomey: Kelly, you've got a lot of information. Hopefully that helps you understand what this is and what your options are.

Caller: Yes. Can I ask one quick question?

Dr. McMenomey: Sure.

Caller: What's the difference between a bone anchored hearing aid versus the cochlear implant?

Dr. Shapiro: With a cochlear implant, the surgeon is putting the electrode array in the cochlea in the vicinity of the auditory nerve to stimulate the auditory nerve. In other words, the patient has what we call an inner ear or sensorineural issue. With a bone anchored implant, what we're doing is we're bypassing the outer ear and the middle ear and we're stimulating the inner ear directly. So someone with single-sided deafness, if it's your right ear that's out, if you had a bone anchored hearing aid, the sound would reach that microphone and stimulate your whole skull and your better left ear, your better left cochlea would pick up the sound. So your hearing from all sides, you know, from 360 degrees, but everything is going into that healthier left cochlea. So a Baha is stimulating the cochlea directly, bypassing the outer ear and inner ear.

Not to confuse, the reason it works with single-sided deafness is you're bypassing that dead right ear and you're stimulating that left ear.

Dr. McMenomey: You're hearing from your left ear, but you're picking up sounds via a microphone from your right side, but it's not restoring your right ear.

Caller: Okay. Thanks very much.

Dr. McMenomey: Great discussion. If you're out there and you want to get the closed caption livestream, go to the Facebook page. Thanks to the ACIA for doing that. I wanted to make sure we talked a little bit in the closing minutes here about some of the barriers that we see in cochlear implantation. Colin touched on it a little bit, and I bet his numbers are similar to mine in that the youngest patients I've implanted is six-months-old and the oldest is 96-years-old. And I get e-mails pretty much every week on the show saying am I too old? Is my father too old for a cochlear implant? Is my baby too old? Too young? And the answer is that's a huge age range. So I wouldn't let that stop you from going in and getting evaluated, most certainly. But maybe let's have a little bit of a roundtable here on the barriers that we face. We all know, in the adult population, we're still not doing a very good job of helping everyone that could be helped with cochlear implant technology. The numbers are somewhat abysmal and haven't really moved much over the years and around 5, 6, 7%. What are your thoughts on how we can help change that? Maybe one of the ways is with more Doctor Radio shows.

Dr. Driscoll: Absolutely. You should have Doctor Radio weekly. Just on hearing, of course. It's a multifactorial issue, with multiple barriers. Right? I think the more people that get implanted and share their stories and the more mainstream it becomes, you build momentum and understanding that look, you can actually get through the surgery. It's an out patient operation and you can hear a lot better. And it changes your life. And it's the best thing. The more those stories get out, the stories that we all see, week in, week out, I think the awareness just grows. As people -- I have good hearing, but what I see a lot is people are losing hearing and it's very hard to take that step of potentially giving up a hearing aid for a cochlear implant, because you've been hanging onto this hearing. It's so vital to your communication. And I think all of us on the show today can look at the hearing test and look at the person and think, gosh, this person is going to do a lot better with a cochlear implant than a hearing aid. But emotionally, it's a very hard decision to make. And it just results in delay of proceeding. I am amazed. I had somebody literally in their sixties say, oh, I think I'm too old for that. And I routinely ask people, well, when does hearing become unimportant? It becomes more important as we age, because we're able to do less and less. Communication with our friends and family is so central to our well-being.

Dr. McMenomey: And also, socializing to our otolaryngology peers, internal medicine docs, you don't have to be stone cold deaf. Most have a fair amount of residual hearing. Right, Bill?

Dr. Shapiro: Absolutely. We also need to do a better job of educating the private practitioner and audiologist around the country. I think they still don't know what a cochlear implant is capable of doing and so, therefore, they are not referring their patients to us. So setting up relationships with private practitioners around your hospital, I think, is very important. So we

have set up some relationships with private practitioner audiologists and we're starting to get referrals from them, implanting them, and it's really worked out very well.

Dr. McMenomey: Yeah. I think that's going to be great, and bring them into the fold and bring them as a part of the process, and we don't see each other as competition, but we see each other as people involved in helping people hear. Right?

Dr. Driscoll: And the vast majority of patients we implant can communicate quite well in quiet environments. Right? So to be fair, people don't recognize that they can actually hear a lot better and providers don't recognize that these people actually struggle in noisy environments, but can do okay in it an office. And a standard audiogram doesn't really give you the information you need to determine candidacy. And I do think, you know, we're maybe getting better at setting -- at looking at audiograms and saying, look, everybody who scores below these criteria really should be considered for cochlear implant evaluation. But the standard audiogram does not really give the answer. Right?

Dr. McMenomey: Right. I know when I go out and talk to audiences of general ENT docs or family practitioners, I say, listen, I don't want you to understand the sophisticated tests we do that you don't have access to. So I'm going to tell you, send people into your local implant center. If they have bilateral hearing aids and they're struggling and they're telling you they're just not getting the benefit that they should, that, to me, is a person that should get evaluated, for sure.

Dr. Shapiro: Absolutely. That's what we do all day.

Dr. McMenomey: All day. And it's much better to evaluate people, over evaluate people, and find people, and if they're not a candidate, that's okay. We can help them find a better hearing aid solution for them, and we also have a baseline to test off going forward.

Donna Sorkin: In my case, this is Donna, it was my internist that urged me to go to an implant center and get evaluated. And he could tell that even wearing hearing aids, I had to be right next to him and looking at his mouth to be able to understand what he was saying, and the phone was gone, had been long gone. So in my case, it was my primary care doctor that did the research for me and referred me on to an implant center and an excellent CI surgeon. And he continued to play that role for his patients.

Dr. McMenomey: Get involved. Right? Get involved? If you need help from us, you can always contact the American Cochlear Implant Alliance for handouts for your patients. There's a lot of us out there that are willing to help educate others about the process of cochlear implantation. I can't believe we're out of time already. I want to thank Dr. William Shapiro, Dr. Colin Driscoll, and Donna Sorkin for taking time out of their day. Thanks to the ACIA for doing the closed captioning. I think that was great. If you still have questions about this, we're going to do open phones for the next 30 minutes. Jump on the phone. 877NYUdocs. And then we'll do speech and swallowing disorders at the bottom of the hour. We'll take a quick break and be right back. Stay tuned.