



**MS Learn Online
Feature Presentation
Speech Disorders in MS
Featuring Patricia Bednarik, CCC-SLP, MSCS**

>>**Kate Milliken:** Hello. I'm Kate Milliken, and welcome to MS Learn Online. There are many symptoms associated with multiple sclerosis, and for some this may include speech disorders. Although speech disorders are not one of the most familiar symptoms in MS, they are fairly common. To help us better understand the speech disorders that can occur in MS and what can be done about them, we are joined by Patricia Bednarik. Ms. Bednarik is a speech/language pathologist at the University of Pittsburgh MS Center. Welcome to MS Learn Online.

>>**Patricia Bednarik:** Thank you very much, Kate.

>>**Kate Milliken:** So, Pat, why don't we start with what causes speech disorders in MS?

>>**Patricia Bednarik:** Well, the things that cause speech problems in MS are the same types of things that cause the physical problems in MS, and that is lesions in the brain and especially lesions in the brain stem area.

>>**Kate Milliken:** What types of speech disorders are there out there, and what are some of the symptoms associated with those types of speech disorders?

>>**Patricia Bednarik:** Usually when we look at MS, we are looking at two primary types of speech disorders. We are looking at dysarthria and we are looking at something called dysphonia.

>>**Kate Milliken:** Can you give a definition of each?

>>**Patricia Bednarik:** Sure. Dysarthria is a group of motor speech disorders, and it is characterized by changes in respiration, phonation, resonance, articulation, porosity, stress emphasis, those kinds of things. So, in other words, it's not just tongue weakness. Many times dysarthria sounds like slurred speech. As a speech pathologist, what we look at, is it just tongue weakness, which is not dysarthria, versus a combination of is the person able to move their lips, their tongue, are they breathing correctly, those sorts of things. So, it has to be a collection of problems.

>>**Kate Milliken:** And the dysphonia?

>>**Patricia Bednarik:** The dysphonia is a disorder of voice, and that has to do, also, with respiration, but it also has to do with vibration of the vocal cords to produce sound. So, in MS a lot of times there may be difficulty using the voice, making the voice go, or in some cases the voice may be totally absent, where the person can only whisper.

>>**Kate Milliken:** Is one harder to treat therapeutically than the other in terms of dysphonia?

>>**Patricia Bednarik:** No, not necessarily. They tend to co-exist together, and so in speech pathology we certainly see them both, and we treat them usually both concurrently.

>>**Kate Milliken:** How are these speech disorders diagnosed in MS?

>>**Patricia Bednarik:** Well, you would come to a speech language pathologist and what we would do is we would start out doing a comprehensive medical history, and that would include some personal questions that people are often surprised that we might ask. So, I will ask a lot about somebody's medical background, their general health history. I will ask a lot about medications, much to people's surprise, because medications can have an effect on how the voice sounds, particularly any medications that may dry out the mouth. Medications that may involve anything used to treat spasticity may have an impact on speech or voice. So, I look at those very carefully.

I am also going to look at occupation, because what are the demands of the voice and what are the demands of speaking? I'm going to look at educational history. I

am going to look at family history to see are there other problems? One of the things when we do a history is not everything is because of MS. So, I'm always looking for everything, not just those things related to MS.

And I'm also going to be checking for any kind of cultural sensitivity issues, because, again, during the evaluation, and particularly during the treatment phase, it's important for the clinician to be sensitive to any particular cultural issues. Any time you're working around the mouth and working inside the mouth, it's a very sensitive, psychologically sensitive area for a lot of people. And so it is always good to be aware of those kinds of things as a clinician.

>>**Kate Milliken:** It is really interesting to think that it could -- all of those issues could kind of be starting at the source. You know, source of the medicine or whatever else.

>>**Patricia Bednarik:** Right. Right. Right, right.

>>**Kate Milliken:** What can be done to help speech disorders?

>>**Patricia Bednarik:** There are many things that can be done. If someone is diagnosed with a speech problem, usually what we will do is we -- and depending on the assessment -- we can do a lot of exercises. So, there may be exercises involving strengthening of the muscles of speech or range of motion of the muscles of speech. We may use biofeedback. We may use surgery in some cases, prosthetic devices.

For example, in the case where somebody has a resonance problem, resonance meaning hypo- or hypernasality. Many times if the soft palate -- you know, the uvula that hangs down the back of your throat, that's part of the soft palate. If that is hanging down too low, people sound like they're talking through their nose, and you can actually put in an artificial lift that will help lift that up so that they can have a normal-sounding speaking voice. So, sometimes prosthetic devices are important.

Sometimes medicines can be used, such as baclofen or Botox. And then if somebody's speech is very, very involved and it is very difficult for them to communicate, and, again, one of the things that I look at is -- what I want to know as a clinician, if somebody has an emergency situation, are they able to communicate well enough to make themselves understood to a stranger? We may

recommend some type of supplemental communication, such as an augmentative or alternative means of communication, so maybe a board or a book that they point to with pictures or letters. Maybe in severe cases it may be one of those computerized speaking devices. But, again, we always prefer to use the human voice, because there really is no substitute for that. And sometimes we use a combination of those things. Because, again, you have issues of fatigue and things like that, and sometimes there is just strategies. We also use vocal rest.

>>**Kate Milliken:** I know that this is a question just from your personal experience and you can't make a blanket hypothesis statement on this, but if somebody has been living with MS for a long time and had speech problems for a while, is that a harder challenge for you than someone who instantly has a problem and comes to you for immediate rehab? Does that make a difference?

>>**Patricia Bednarik:** No, not necessarily, because the goal is basically the same, is to kind of look at what you can improve and maybe supplement what you can't. I think it is important to have realistic expectations of treatment. They need to really realize that these problems are caused by lesions and that I cannot fix the lesion, I cannot make it go away, as much as I'd like to. But we certainly can do things to improve the ability to functionally communicate, and that's what the goal is. And when we talk about goals in therapy, a very important thing is I want to know what is the person's goal for their communication? It's not what I think they should be doing; what I want to know is what's important to you?

>>**Kate Milliken:** I certainly understand, having spoken to people with MS, having MS myself, the frustrations people experience in terms of having symptoms that won't go away. So, I am curious from your perspective how, when you work with people with speech disorders, how do you give them faith? How do you keep them revved up if the process is slow?

>>**Patricia Bednarik:** Okay. What I like to focus on is I know that the medications that are out there now, I've seen how well people have done on them so far. And I know that what we have now is not the end of treatment, because there are better treatments that are coming down the road for people with MS. My goal as a clinician is to keep people going and to keep them active until the next best thing comes along.

>>**Kate Milliken:** Thank you, Pat. I really, really appreciate it. I really appreciate you helping us better understand speech disorders.

>>**Patricia Bednarik:** My pleasure.

>>**Kate Milliken:** Pat will be joining us again to discuss another issue that some people with MS experience: swallowing problems. We look forward to seeing you then. This is Kate Milliken for MS Learn Online.