New treatment relieves swallowing disorders

Written by Scott McKimmy | | news@toledofreepress.com

Patients suffering from dysphagia - or difficulty swallowing - as a result of conditions such as stroke and Parkinson's and Lou Gehrig's diseases, as well as radiation treatment for head and neck cancers, traditionally have used a feeding tube to provide nutrition.

Some need one for life.

During the past three years, however, the practice has begun to change thanks to two devices being introduced to the medical community. A handheld electrical stimulator known as VitalStim and the more advanced Experia unit allow doctors and therapists to help create new neurological pathways between the muscles and the brain, augmenting conventional methods and raising patients' quality of life.

"We would do what we just called a typical dysphagia treatment," said Beth Courtright, coordinator of rehab services at The Toledo Hospital. "We still do those same things like, for instance, oral-motor exercises, pharyngeal-strengthening exercises, tongue-based retraction exercises, things like that. We still do those things, but this treatment is just a modality to it to give it that extra boost to what we're already doing."

She said the two machines routinely improve patients' swallow function, in some cases eliminating uncomfortable and costly feeding tubes. All hospitals within the ProMedica system have VitalStim units on site, which have been available since late 2005, while the company's two Experia machines are transferred from site to site as needed.

Yet the Experia machine, available since December 2007, uses three waveforms as opposed to VitalStim's one waveform, allowing for treatment on a broader range of patient types and greater tolerance by patients sensitive to electrical stimulation.

"The nice thing about this [Experia] machine is it has the [electrical-stimulation] function that the other machine has, but it also has a biofeedback piece to it so the patient can actually see, feel, hear how strong their swallow is," she said. "It gives them that feedback that they can tell that they're making a good, strong swallow."

In severe cases, some patients are unable to swallow their saliva. Courtright described a man undergoing treatment in Defiance who constantly used tissues for saliva management. The Experia treatments reduced his usage from about three boxes per week to "a couple of tissues a day." The improvement allowed him to function better in social situations most people take for granted, such as restaurant dining, birthday parties and pleasures as simple as meeting a friend for coffee.

"Maybe the patient will never eat again because their brain-stem stroke has caused them not to be able to eat for the rest of their lives. But even if we can increase their saliva management, where they can just swallow their own saliva, it's a quality of life," she continued.

"It seems so simple and minimal to us, but to somebody else, it's a huge thing. They're not carrying a suction machine around or they're not carrying these boxes of tissues or a bag to put their used tissues in."

Despite their success in increasing quality of life, the treatments have failed to receive recognition as standard care practices eligible for total reimbursement from insurance companies and Medicare, according to Josh Pollock, an Experia specialist based in Cleveland. He said the average cost associated with tube feeding is more than $30,000 per year, while treatments with the machines ultimately cost considerably less.

Pollock cited studies showing that feeding tubes account for 6 percent of Medicare costs - more than $670 million - and create risks, such as atrophy. About 60 percent of stroke patients have dysphagia, and historically, about 20 percent of dysphagia patients on feeding tubes have died within one year.

"As far as it considered being standard care, we're working on that," he said. "We have more research out there that's been done on anything else in speech-language pathology. But yet we've got about 22 bodies of research that support the use of neuromuscular stimulation on the anterior portion of the neck. So we have more out there than anything, but yet I can't figure how this still is not considered standard care."