Loyola surgeon first in the Chicago to implant Esteem hearing device
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Lesa Merlo's hearing loss was so severe she had to read her children's lips when they talked to her. Then Dr. Sam Marzo of Loyola University Medical Center implanted a new hearing device in her middle ear. "I could hear their real laugh for the first time since they were babies," she said. "It was different, clear, pure and more beautiful than I could have ever imagined."

For the first time in years, Merlo also can hear leaves blowing in the wind or heels clicking on a tile floor. She marvels at how much better her favorite songs sound. And she has turned off the closed captioning on the television in the Hinsdale home she shares with her husband and three school-age children.

"The device has had a profound, life-changing effect," she said.

The device, called the Esteem®, was recently approved by the Food and Drug Administration, and Marzo is among the first surgeons in the Chicago area to implant it. Marzo is a professor in the Department of Otolaryngology of Loyola University Chicago Stritch School of Medicine. Marzo is doing two or three implants per week, and has done a total of 30.

The device is an alternative to hearing aids for people with moderate-to-severe hearing loss. It is implanted in the middle ear, and no part is visible. "An initial study showed that it works much better than hearing aids." Marzo said. The system uses the natural ear to pick up sound. When sound causes the ear drum to vibrate, the device senses the vibrations and turns them into electrical signals.

These signals are sent to a sound processor, which adjusts the signals to meet the needs of the user. The improved signals then are sent to a device that mechanically stimulates a tiny bone called the stapes. The stapes, in turn, stimulates the cochlea. (The cochlea is a hollow tube, shaped like a snail shell, which contains the sensory organ of hearing.)

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