

Dr. Arginteanu first evaluates a patient to ensure there is no danger of imminent paralysis, after which he or she is counseled about options. Fortunately, the majority of cases do not require surgery. Instead, most treatments involve lifestyle and dietary modifications, and therapeutic exercise programs.

At Englewood Health, a multimodal team that includes pain management specialists can often treat patients successfully with epidural steroid injections, up to three per year, which allows roughly 80% of patients to delay or avoid surgery.

Advances for Cervical Spondylosis

For patients requiring surgical intervention, the FDA approved, in early 2019, artificial cervical discs for multiple levels of bones. "Previously, when someone had a serious problem in their neck, we would need to fuse multiple levels [see Figures 1-3]," said Dr. Arginteanu, who is also an associate clinical professor of neurosurgery at Mount Sinai Health System, in New York City.

"Now we can perform artificial disc replacement between the discs of multiple sets of bones. At Englewood, we are definitely at the cutting edge of this technology."

The implant involves first making an incision in the front of the neck, then removing one damaged disc or multiple damaged discs. The discs are replaced with a device made of a combination of titanium and plastic.

Patients implanted with the device are able to return home the same day. "Results are excellent," Dr. Arginteanu said. "Patients return to full activity."

On the horizon are engineered biomaterials, which have shown success in animal models and are an alternative to artificial discs. Farther down the road is injection of genetic materials into a degenerated disc to reverse the deterioration, which has also shown promise in animal studies.

