Eagle syndrome is the constellation of symptoms that may arise from an elongated styloid process. First described in 1937, the syndrome may include facial pain, neck pain, throat pain, dizziness, voice changes, globus sensation, or dysphagia, often elicited when the patient turns the head or neck. Definitive treatment requires the surgical removal of the elongated portion of the styloid process performed via an intraoral or transcervical approach. While the intraoral approach includes shorter operating time and a more satisfactory cosmetic result, it is limited by poor visualization which may increase the risk of injury to adjacent neurovascular structures. For the sake of the lack of haptic feedback on the da Vinci robotic system, the surgeon and assistant alternated between manual palpation and robotic dissection. Excellent visualization of the greater vessels, their branches, and the lower cranial nerves was noted. Using the 0-degree and 30-degree transoral endoscopic tools, the stylohyoid ligament was carefully dissected, the styloid styloglossus cut with monopolar cautery, and the stylohyoid ligament was exposed to the skull base. With the robotic assistance guided by the da Vinci surgical assistant cut by touch with a harmonic scalpel. Muscle and mucosa were closed in the standard manner. The patient’s recovery was uneventful, and within two months postoperatively she noted complete resolution of her symptoms and remains so at twelve months postoperatively.

Case

A 47-year-old woman with a distant history of blunt neck trauma sustained in a surfing accident presented with globus sensation, throat discomfort, intermittent neck pain, and hoarseness. Her symptoms varied with head positioning. Prior gastrointestinal and craniocervical spine evaluations failed to identify an etiology for her symptoms, and empiric antireflux medication failed to alleviate her symptoms. Physical exam was significant for hoarseness and right true vocal fold paralysis, both worse with her head turned to the left. Her neurologic exam was otherwise unremarkable. Prior laryngoscopy, gastrointestinal, and craniocervical spine evaluations failed to identify an etiology for her pain. A CT scan was obtained as part of her cervical spine evaluation. CT scan findings were significant for an elongated right styloid process extending 3.1 cm in thickness, additional calcified stylohyoid ligament, and the styloid styloglossus cut with monopolar cautery, and the stylohyoid ligament was exposed to the skull base. With the robotic assistance guided by the da Vinci surgical assistant cut by touch with a harmonic scalpel. Muscle and mucosa were closed in the standard manner. The patient’s recovery was uneventful, and within two months postoperatively she noted complete resolution of her symptoms and remains so at twelve months postoperatively.

Figure 1. Intraoperative transoral view of right parapharyngeal space.

REFERENCES

4. David A. Gudis, MD. Contact: Department of Otorhinolaryngology: Head and Neck Surgery University of Pennsylvania David.Gudis@uphs.upenn.edu

Figure 1. Intraoperative transoral view of right parapharyngeal space.