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## C0372 - DECONSTRUCTING ENDOSCOPIC ENDONASAL ODONTOIDECTOMY; TECHNICAL HINTS (VIDEO CASE REPORT)

G. Pérez Prat, E. Cárdenas Ruiz Valdepeñas, A. Kaen, A.Y. Meza Martínez, M. Troya Castilla, M. Olivares Blanco and F.J. Márquez Rivas

Hospital Universitario Virgen del Rocío, Sevilla, Spain.

### Resumen

**Objectives:** Odontoid process removal surgery is not a common procedure. The expanded endonasal approach is gaining relevance as the elected method to accomplish that purpose. We present a step by step description of how we do it, highlighting the tenets and technical nuances; supported by video recording and cadaveric specimen dissections.

**Methods:** We present a two case series of odontoid process removal through an EEA performed in our hospital from 2012 to 2016, including a giant basilar invagination in a young female and a retroodontoid pannus in elder male. All patients underwent MRI and CT scans set for intraoperative navigation (Medtronic StealthStation 7®). No modifications of our standardized technique were demanded.

**Results:** After both surgeries no neurological adverse events were registered in the acute phase. The postoperative course did not differ from the usual requirements after an EEA. Nevertheless, the male patient died after suffered a respiratory arrest 7 days after the procedure during his ICU stay, without any radiological evidence of brainstem damage in a postoperative MRI. The female patient has had an outstanding neurological evolution without further incident after an over 6-month follow up.

**Conclusions:** The expanded endonasal approach to the odontoid process can be systematically reproduced as long as proper materials are available. Thorough anatomical knowledge leads us to a safe execution.