# Calvian Endo-pen

Over the past few years bipolar electrocoagulation techniques in neurosurgery have been continually improving. However, limited access during endoscopic endonasal transsphenoidal surgery (EETS) for central skull base pathologies and the requirement of very precise coagulation in that dedicated anatomical area requires further refinement of bipolar coagulation instruments.

Gerlach et al., describe the experience (effectiveness of coagulation, intraoperative handling, and the use as a dissecting tool) with a new type of coagulation forceps, the Calvian endo-pen (Sutter Medizintechnik, Freiburg, Germany) during EETS.

From June to August 2015, 12 patients with central skull base lesions (9 with a pituitary neuroendocrine tumor and 1 each with epidermoid, hemangioma, and juvenile angiofibroma) were operated on with the Calvian endo-pen.

The application of the Calvian endo-pen was feasible in all cases. The angled thin tips proved to be very effective and precise for soft tissue coagulation to achieve hemostasis. Even very small vessels could be occluded selectively. It was also helpful for outward dissection in separating normal from tumor tissue.

The use of the Calvian endo-pen is safe and effective during EETS for central skull base pathologies. Its ease in intraoperative handling (maneuverability, cleaning) and precise coagulation makes it a promising instrument for EETS [1].

## Videos

<html><iframe width="560" height="315" src="https://www.youtube.com/embed/LJ_t5VxV2aI" frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe></html>

1)
Gerlach R, Rosahl S, Kellner G. Calvian Endo-pen: New Coagulation Forceps for Endoscopic Endonasal Transsphenoidal Surgery. J Neurol Surg A Cent Eur Neurosurg. 2018 Jul 6. doi: 10.1055/s-0038-1655731. [Epub ahead of print] PubMed PMID: 29980157.