Radiofrequency in Endoscopic Endonasal Skull Base Surgery

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Introduction

Extended endoscopic endonasal transsphenoidal surgery is an innovative and minimally invasive approach to the lesions involving the midline skull-base. Besides the numerous advantages of such approach, there is the need of a reliable and safely maneuverable tool for bleeding control. We report our initial experience with dedicated radiofrequency-based bipolar and monopolar instruments.

We have been evaluating the usefulness and the efficacy of radiofrequency-based bipolar and monopolar instruments.

Radiofrequency bipolar forceps and monopolar sticks and loop-wires in the last 6 months for a variety of pituitary and skull-base lesions including pituitary adenomas, tuberculum sella meningiomas and suprasellar craniopharyngiomas.

Bleeding control

Bleeding control approaches to the skull base is an innovative and minimally invasive approach to the lesions involving the midline skull-base. Besides the numerous advantages of such approach, there is the need of a reliable and safely maneuverable tool for bleeding control. We report our initial experience with dedicated radiofrequency-based bipolar and monopolar instruments.

Conclusions

We have found the radiofrequency bipolar forceps and monopolar stick quite useful during the different steps of the approach. In particular, they are useful during the intradural maneuvers, where the room for the movements is limited, but also during the nasal and sphenoid phase of the approach, where the bipolar forceps was found easy to handle and to use within the nose, where we try to avoid, if possible, the monopolar coagulation in order to spare the mucosa and the olfactory fibers.

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