EASYTRAC

A unique self-expanding retractor (EASYTRAC®) is described, which provides several advantages for endoscopic pituitary surgery-enhanced visualization, creating more space, reducing the mucosal damage, and enhancing the nasal quality of life (QoF). Presented here is the proof of concept.

METHODS: EASYTRAC® is made of an aircraft-grade, SS-titanium alloy to provide optimal opening strength with a low profile (0.5 mm thick). It has a nonreflective, smooth surface finish. Patented design and wire pulling method of the EASYTRAC® makes it easy to insert and deploy. EASYTRAC® is inserted through the submucosal tunnel using a small, unilateral mucocutaneous incision. Following this, the ring attached to the wire is pulled out to deploy the retractor. This provides expansion of the retractor leading to fracture of the septum to one side at the keel of the vomer. The rest of the surgery is performed in the standard manner using an endoscope. The retractor is a single-use, disposable instrument and available in three different sizes.

RESULTS: Five endoscopic endonasal surgeries have been performed using the EASYTRAC®(four pituitary neuroendocrine tumors, one craniopharyngioma). Deviated nasal septum (DNS) was present in two of the surgeries. All surgeries were approached through the right mucoseptal corridor, and presence of DNS did not reduce exposure (<10 minutes for exposure). No hardware problem was observed in any of the cases. Intraoperative cerebrospinal fluid (CSF) leak (n = 1) was managed with intraoperative, standard, triple-layer closure with glue and lumbar drain.

CONCLUSION: Retractor seems to be safe, easy to use, and effective. The surgeon's capabilities are enhanced by the retractor's dynamicity, minimal fogging of scope, minimal trauma to the mucosa, and adequate space to allow the introduction of three instruments through a single nostril [1].

1)
Chandra PS, Kaur KD. Development of a Unique Retractor for Performing Endoscopic Pituitary Surgery-EASYTRAC. Neurol India. 2019 Nov-Dec;67(6):1509-1512. doi: 10.4103/0028-3886.273609. PubMed PMID: 31857547.