



Novel Technique for Endoscopic Stenting of Rathke's Cleft Cysts

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Introduction

Steroid-eluting stents have been used to maintain patency of endoscopic Rathke's cleft cyst marsupializations and prevent recurrence.¹ Typically, these stents are developed for endoscopic deployment in the paranasal sinuses for management of inflammatory sinus disease and are not specifically developed for placement in the sella - as such, the deployment device is ergonomically not suited for placing the stent in the sella.

Other studies have published using forceps or ring curettes concurrently with the deployment device to guide placement of the stent at the cyst opening.^{2,3}

This study proposes a more ergonomic technique for one handed delivery of the stent to prevent Rathke's cleft cyst recurrence.

Methods and Materials

Propel Mini stents were utilized for stenting after marsupialization of the Rathke's cleft cyst. The stent is compressed per normal protocol but loaded into a disposable 12 Fr frazier suction device instead of the included deployment device. The trajectory of the frazier suction more directly approaches the sella and allows for more direct delivery. (Figure 1).



Figure 1: Propel Mini deployment device (top) with deployment trajectory at upward angle. Twelve Fr Frazier suction with deployment trajectory posteriorly more directly toward sella.

Methods and Materials (cont.)

The stent can then be deployed in a controlled, one-handed fashion, by slowly advancing the suction stylet (Figures 2 and 3).



Figure 2: Single handed deployment of Propel Mini using the suction stylet under endoscopic visualization

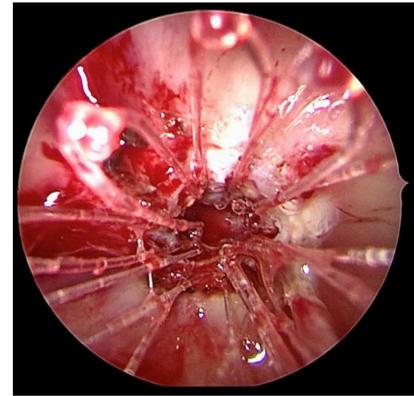


Figure 3: Endoscopic view of Propel Mini deployed into Rathke's Cleft Cyst marsupialization cavity

Results

This technique has been successfully used in 4 patients without cyst recurrence or CSF leak.

Discussion and Conclusions

Loading Propel steroid eluting stents into a frazier suction instead of the included deployment device may allow for more direct, controlled, one-handed delivery of stents into the marsupialized Rathke's cleft cyst cavity.

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