

# The endoscopic transseptal approach for choanal atresia repair

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## Resumen

**Background** There are many standard repair options for choanal atresia including puncture, dilatation and drilling of the atretic plate. Most of these techniques involve postoperative stenting, which may promote granulation and scarring, with possible progression to restenosis. This article describes a novel approach for choanal atresia repair without postoperative stenting.

**Methods** This article describes our experience with this choanal atresia repair technique utilized in 16 pediatric patients and 1 adult patient across multiple tertiary pediatric and rhinology centers during 2008 through 2015. Seven cases were bilateral and 10 were unilateral. Surgery was performed using an endoscopic transseptal approach with preservation of the mucosa and creation of flaps. No stents or packing was used. The main outcome measures were: response to treatment based on endoscopic examination, need for further revision and incidence of complications.

**Results** All patients underwent routine postoperative endoscopic inspection of their nasal cavity, postnasal space, and assessment of neochoanal patency. The neochoanae of all patients remained patent to a minimum follow-up duration of 9 months with most patients follow up for 2 years or more. Two neonatal patients required transfusion postoperation from intraoperative bleeding. Two pediatric patients developed postoperative respiratory complications. One patient required revision surgery for nasal vestibule scarring from incision made on the nasal alar to facilitate the initial endoscopic approach.

**Conclusion** This novel endoscopic transseptal repair technique is effective in the management of choanal atresia. Careful fashioning of mucosal flaps and the omission of stenting has resulted in lasting patency of the neochoanae.

## Palabras clave

**Palabras clave de autor:** [choanal atresia](#); [endoscopic](#); [transeptal](#); [non-stented](#); [atretic plate](#)

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