The first 100 cases of paediatric transnasal extended endoscopic procedures in Birmingham (UK)

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Background:

Extended transnasal endoscopic procedures including anterior skull-base surgery are regularly performed in adults but their use and outcomes are not well recognised in a paediatric setting.

Objectives:

To evaluate our experience of extended paediatric endoscopic sinonasal and skull-base surgery.

Methods:

We report on the first 100 cases between 2009 and 2017 of extended sinonasal and anterior skull base surgery performed at Birmingham Children's Hospital.

Results:

109 procedures were performed on 100 children with a mean age of 5.4 years (range; 1 month–17 years) and a male preponderance.

Unlike adult practice, pathology in this paediatric cohort was very heterogenous.

Early Complications

- 10 temporary pituitary dysfunction (< 12 weeks)
- 5 post op CSF leaks
- 1 permanent unilateral visual loss
- 1 tension pneumocephalus
- 31 extensive nasal crusting

Late Complications

- 6 nasal saddle-deformities
- 2 mucocoele development

Facial symmetry & growth does not appear to be significantly affected following endonasal surgery. A late saddle deformity is the main long-term problem despite minimal septal surgery.

Presenting Complaint

Conclusion

Endoscopic surgery is now well established in Birmingham Children's Hospital.
A dedicated multidisciplinary team is essential.
Early results show good outcomes and suggest minimal long-term effects on facial development.

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