

Challenges of Paediatric Rhinology – when it comes to surgery, could less be more?

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Increased understanding of the sinonasal anatomy and pathophysiology, combined with imaging advances and the introduction of image-guided surgery, has enabled surgeons to safely perform more complex procedures with reduced morbidity in adult as well as paediatric patients. Traditionally, a more conservative approach was favoured for the paediatric and adolescent group of patients, predominantly due to perceived potential harmful effects of sinonasal surgery on facial growth. The intricate balance between avoiding iatrogenic damage and yet allowing an optimal treatment to be utilised continues to pose one of most taxing clinical dilemmas in paediatric ENT. This is magnified with uncommon or new and incompletely understood clinical entities seen in the adult population that tend to diverge from their natural progression of disease in the paediatric population.

Case 1: A 9-year-old girl was treated for psammomatoid ossifying fibroma with extensive sinus involvement. Initial surgery managed to achieve macroscopical clearance of the disease. Further clearance was carried out with endoscopic debulking under image guidance. However, the disease could not be safely cleared due to the proximity to the orbital apex and cribriform plate. Therefore, a conservative approach was agreed with the family. Over time, bony changes appeared to mature and no further progression or active disease was seen eight years after primary surgery.

Case 2: A 16-year-old boy with imaging suggestive of allergic fungal sinusitis. Limited sinus surgery was performed to confirm the diagnosis. More extensive surgery was offered to clear all the sinuses. The patient, however, declined. Significant improvement with topical medical therapy was recorded two years after surgery with a patient having no nasal symptoms. In both cases, conservative treatment was practised with satisfactory results based on the individualised assessment of the disease progress. With this in mind, we would like to propose that individually tailored treatment should be considered for paediatric patients with multi-disciplinary approach that will consider dynamic changes present in disease evolution that might diverge from the expected “adult” course of the disease.

Key words: paediatric rhinology, endoscopic sinus surgery, psammomatoid ossifying fibroma, allergic fungal sinusitis