Sinus Disease in Apert’s Syndrome: Durable quality of life improvement following surgical intervention

Apert’s syndrome is an autosomal-dominant condition characterized by craniosynostosis. In severe cases, patients can undergo primary fronto-orbital advancement during infancy; however, this surgical treatment plan remains controversial. Previous studies have demonstrated that the need for a secondary fronto-orbital advancement or foreheadplasty is high in this patient population. While some consider secondary operations to be more challenging, recent research has shown that well-planned primary frontal advancement surgery is followed by satisfactory reossification, permitting successful surgery.

In patients with anterior craniosynostosis, such as in cases of Apert’s syndrome, frontal sinus development is typically impaired, causing risk of sinus disease. Prior cranial operations and sinonasal development can make surgical intervention challenging. In cases of children with persistent sinonasal symptoms, the Sinonasal-5 Quality of Life Survey (SN-5) which assesses areas of sinus infection, nasal obstruction, emotional distress, and activity limitations, has been validated as an effective measure of quality of life (QOL), making it suitable for outcomes studies and routine clinical care. In this study, we report the surgical management and clinical outcomes of a patient with chronic sinusitis complicated by Apert’s syndrome, supported by results from the SN-5 QOL survey.