Chapter 13

Disorders of the Salivary Glands in Children

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Core Features

- Primary lesions arising from the salivary glands in children are rare.

- Salivary gland disorders in the pediatric age group can be divided into two general categories: (1) salivary gland masses and (2) sialorrhea in neurologically disabled children.

- Salivary gland masses in the pediatric age group are more likely to consist of vascular anomalies and infectious and inflammatory lesions than epithelial glandular tumors.

- When oral motor therapy either fails or is not feasible for neurologically devastated children with sialorrhea, management options include pharmacotherapy or surgery designed to either redirect the flow of saliva or to decrease saliva production.

Complications to Avoid

- A first branchial anomaly must be considered in the differential diagnosis of an intraparotid cyst or recurrent parotid abscess. Failure to appreciate that these cystic lesions may be branchial in origin is a common cause of incomplete excision and recurrence. Appreciate the intimate relationship the anomalous tract can have with the facial nerve and consider a superficial parotidectomy approach.

- Parotidectomy can inadvertently be performed in children for lesions that typically do not require the operation, such as hemangioma, non-tuberculous mycobacterial infection, cat-scratch disease, and lymphoma. Remember that although solid tumors of salivary glandular origin do occur, they are rare in the pediatric age group. Imaging, fine-needle aspiration biopsy, and serology can help determine the diagnosis prior to committing to parotidectomy.

- When functions such as vision or hearing are at risk from eyelid or ear canal extension of a parotid hemangioma, systemic steroids and laser therapy are reasonable and less invasive options than parotidectomy, which is generally discouraged during the proliferative phase for this benign neoplasm that is expected to eventually involute on its own.

- When pursuing surgical excision or debulking for lymphatic malformations, remember that these lesions are benign and non-neoplastic; incomplete excision is a preferred alternative to inadvertent sacrifice of important neurovascular structures and the facial nerve.

Pediatric Salivary Gland Masses

Special Pediatric Considerations

When evaluating a child presenting with a mass within a major salivary gland, several distinct features unique to the pediatric population should be taken into consideration. Salivary tumors of glandular origin in the pediatric age group are rare, with only approximately 1.7% of all epithelial salivary tumors occurring in children [6]. In addition, masses arising within the pediatric salivary glands are more likely to consist of vascular anomalies such as hemangiomas and lymphatic malformations, or infectious and inflammatory lymphadenopathy, rather than glandular tumors of salivary origin. When true glandular epithelial tumors do occur, their extremely low incidence has often prevented any one pediatric institution from being able to report a definitive treatment algorithm. Thus, the same protocols used to treat adults with salivary glandular tumors, as thoroughly described through the rest of this textbook, are often employed for children. It is believed that the behavior of major salivary gland tumors in children is related to histologic type and clinical grade, similar to adults [36].