Presentation, Diagnosis, and Treatment of a Hairy Polyp Attached to the Soft Palate in a Neonate

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Abstract

Hairy polyps are uncommon, usually pedunculated malformations that can originate in the nasopharynx or oropharynx. This benign congenital lesion is derived from ectoderm and mesoderm. The clinical presentation depends on location and size but may include respiratory distress and feeding difficulty in neonates. In this case report, the presentation and treatment of a hairy polyp in a full term infant will be discussed.

Introduction

Hairy polyps are benign masses most commonly originating from the nasopharynx or oropharynx. They are derived from ectoderm and mesoderm. The clinical presentation commonly includes respiratory and feeding difficulties caused by obstruction from the mass. However, in some patients, the presentation may be without significant symptoms as in this case report.

Case Report

On day eight of life of a full-term female, her mother noted in the infant’s mouth a protruding flesh colored mass that she described as a “second tongue”. A relative in attendance performed a finger sweep of the mouth, causing the baby to swallow the mass. The mass was no longer visible and the infant experienced no respiratory or feeding difficulty. Five days later, the family visited their local Otolaryngologist who performed flexible fiberoptic laryngoscopy and subsequently referred the baby to Children’s Hospital in New Orleans, Louisiana for evaluation of a pharyngeal mass.

On presentation to Children’s Hospital, the patient was a healthy appearing thirteen day old infant with no respiratory difficulty and no difficulty handling secretions. Inspection of her oral cavity was normal with no mass noted. The baby underwent repeat fiberoptic endoscopy which revealed a mass in the left lateral pharynx. Its site of origin was not certain at the time. A barium swallow was ordered which showed an apparent pedunculated polyp arising from the lateral pharyngeal wall, extending to the cervical and thoracic esophagus.

The patient was taken to the operating room the following day for direct examination of the mass. Laryngoscopy was performed and the patient was intubated without difficulty. On inspection of the posterior pharynx, a pedunculated mass was noted to arise from the soft palate, lateral to the uvula, with extension into the esophagus. The mass was delivered from the esophagus and excised at its base from the soft palate without difficulty.

Gross examination revealed a mass, 3.3cm x 2.6cm x 0.6cm, covered with light tan skin with lanugo coating the surface. Histopathology confirmed a hairy polyp described as having keratinizing stratified squamous epithelium, sebaceous glands, non-pigmented hair, and sweat glands. The stalk was fibrofatty with disorganized but well differentiated elastic cartilage. The patient was discharged home the following day with an uneventful recovery.

Discussion and Conclusion

Hairy polyps are benign malformations which have been reported to originate from the nasopharynx, oropharynx, soft palate, hard palate, tonsils, tongue, eustachian tube, and middle ear [1, 2, 3, 4, 5, 6]. They were first described by Brown-Kelly in 1918 [7]. Since then, over 160 cases have been reported with the majority arising from the oropharynx and nasopharynx. A review in 2010 reported an 8:1 female to male ratio [8]. Hairy polyps are derived from ectoderm and mesoderm. Histologically, these masses can contain keratinizing squamous epithelium, hair follicles, sebaceous glands, sweat glands, cartilage, blood vessels, nerve tissue, lymph follicles, and fibrous fatty tissue [3]. There have been no reported cases of malignant transformation [8].

Hairy polyps typically present in neonates with respiratory or feeding difficulties but have been reported later in life [10]. Clinical symptoms depend on the size and location of the polyp and range from no symptoms to fatal airway obstruction [9, 11]. Airway obstruction and feeding difficulties can present with intermittent cough attacks and stridor.

First line investigations of hairy polyps have included ultrasound, MRI, CT, laryngoscopy and, barium swallow [3, 12]. Treatment of the hairy polyp must ensure control of the airway. Once accomplished, complete excision of the mass is curative.

References