Congenital hairy polyp and autoamputation in an infant with acute otitis media

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Hairy polyp is a rare, benign tumor that frequently localizes in the nasopharynx and oropharynx. The embryogenesis of hairy polyp is not known precisely. The clinical profile can vary depending on the size and location of the tumor. In this report, we present a case with hairy polyp who was admitted with acute otitis media and completely recovered after spontaneous autoamputation.

Key words: congenital hairy polyp, autoamputation.

Hairy polyp is a rare, benign tumor that frequently localizes in the nasopharynx and oropharynx. It develops during the early embryogenesis period, and includes the ectoderm and mesoderm, which are two germ layers[1]. It is often presented with respiratory distress in the neonatal period. In this report, a patient with a hairy polyp who was admitted with acute otitis media and completely recovered after spontaneous autoamputation is presented.

Case Report

A 30-year-old, gravida 2 mother delivered a female baby at 38 weeks of gestation via normal delivery, with a birth weight of 3300 g, length of 50 cm and head circumference of 33 cm. She had a prenatal history of polyhydramnios, but had no complications in the postnatal period. The mother had no history of drug or alcohol use or smoking during the pregnancy. The infant had a history of hospitalization for otitis media at 50 days of age. The infant was admitted to the emergency service with ear discharge when she was 2.5 months old. Purulent ear discharge and findings related to otitis media were observed during the examination. She had respiratory distress and nasal flaring. During the examination, a mass covered with thin hairs on its surface emerged following severe coughing lasting for one minute and a cyanosis attack. On gross examination, the mass was 4x1.5x1.5 cm, polypoid, with grey-white appearance (Fig. 1). The cut surface was also greyish white. Microscopically, it was covered by a continuous layer of non-keratinizing squamous epithelium with the presence of appendages, like sebaceous and sweat glands, below the epithelium. The central portion of the polyp included adipose tissue and muscle (Fig. 2). These features were diagnostic of the so-called "hairy polyp".

The results of cranial and nasopharyngeal magnetic resonance imaging (MRI), abdominal ultrasonography, echocardiography, and hearing test (BERA) were normal. No otitis media or any additional symptoms were determined at the six-month follow-up after discharge.

Discussion

Hairy polyp is a rare, benign, congenital malformation of the nasopharynx and oropharynx[1,2]. The embryogenesis of hairy polyp is not known precisely. Malignant malformation of hairy polyp has not yet been specified. It is believed that it leads to polyhydramnios due to the obstruction in fetal swallowing mechanisms[1,3,4]. It is occasionally reported in adults, although it is almost always seen in the neonatal period[5,6].

While hairy polyp is most frequently localized in the nasopharynx lateral wall and soft palate, it can be seen in every part of the body[3,7,8]. It has been reported to localize in the tonsils as well[9]. It is the most common congenital tumor of the nasopharynx and oropharynx, although it is seen rarely[2]. It is more frequent in females than in males[1,3,4]. Female gender of our case

and presence of polyhydramnios during the pregnancy are consistent with the literature.

Hairy polyp usually appears as a distinct malformation. It has been reported rarely in relation to congenital abnormalities such as osteopetrosis, facial hemihypertrophy, cleft palate, left carotid artery agenesis, ankyloglossia, and agenesis of the uvula [2,10,11]. The differential diagnosis should include hamartoma, teratoma, neuroblastoma, hemangioma, meningoencephalocele, nasal glioma, rhabdomyosarcoma, craniopharyngioma, thyroglossal duct cyst, and lingual cyst[4,5,12-14].

The clinical profile can vary depending on the size and location of the tumor. Polyps that cause upper respiratory tract obstruction can lead to respiratory distress, cyanosis, and stridor in the first few hours after birth[1]. Smaller polyps or polyps that do not cause any obstruction due to their localization may remain asymptomatic after birth, and lead to vomiting, asphyxia, hemoptysis, eustachian tube dysfunction, and persistent one-sided nasal flow in the future[2]. Small polyps (<3.0 cm) can be lethal due to a delayed diagnosis[15]. They may also present with feeding difficulties caused by the prolapse of the lesion into the upper esophagus due to coughing and gagging attacks[3,5,12,16].

There have been some case reports of hairy polyp that caused chronic middle ear effusion[13]. To date, there has been no case report of acute otitis media, as in the current case. It is believed that polyps lead to an infection related to mass effect and eustachian tube dysfunction.

Diagnosis is usually made during the physical examination. When an upper respiratory tract mass is identified in the physical examination, the first examination should be rhinopharyngoscopy. This method is helpful to determine the size, origin, and extent of the mass. Computerized tomography (CT) and MRI techniques are also important in the diagnosis. Radiological examinations are useful to determine the mass size, eliminate intracranial extension, distinguish from other masses, and determine the presence of any other related anomaly. Bone abnormalities and midline defects can be identified with CT imaging; intracranial extension and sagittal images can be identified most easily with MRI[2,12,17]. During the radiological imaging of our patient, no additional anomaly was detected.

After ensuring airway safety, the treatment is surgical excision. There are rare cases of recovery after spontaneous autoamputation[1,12,16].

Hairy polyp of the oropharynx, which is a benign tumor, can be associated rarely with otitis attacks. It should be considered in patients with polyhydramnios history in pregnancy and in the presence of frequent recurrent otitis attacks. The association of these masses with intracranial structures should be investigated. This is the first case in the literature with acute otitis media and spontaneous autoamputation.

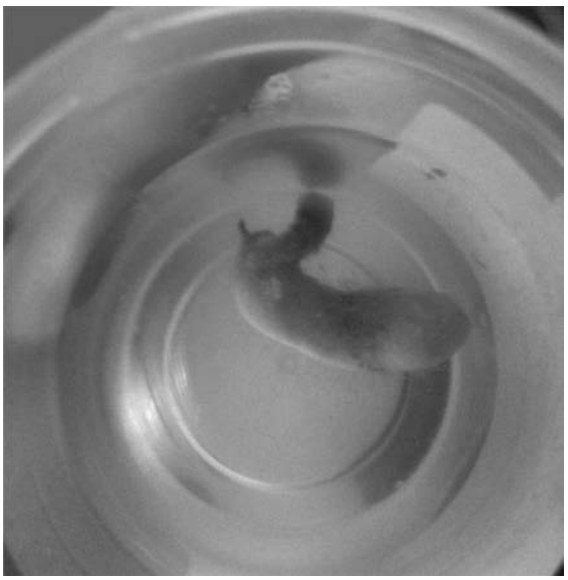

Fig. 1. Image of the hairy polyp after the spontaneous autoamputation.

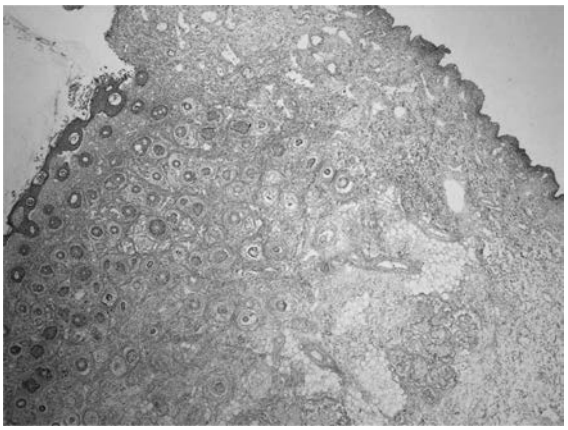

Fig. 2. Microscopic image of the hairy polyp, showing non-keratinizing squamous epithelium and fibroadipose stroma consisting of pilosebaceous glands and sweat glands (hematoxylin&eosin, 40x).

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