ABSTRACT

A retrospective chart review from 2002 to 2007 was conducted at a tertiary care university hospital to identify patients less than 18 years old undergoing surgical excision of a preauricular pit. Charts were reviewed for patient age, presentation, complications, treatment algorithm, and outcome.

RESULTS

A total of 13 children underwent surgical excision of a preauricular pit. Age at the time of excision ranged from 2 years to 15 years (mean 8.75 years); 8 patients were female and 4 were male. Nine of 13 children had bilateral preauricular pits; asymmetrical contralateral pits with no prior history of infection or complications were not excised. Eight of the excised pits were from the right ear and 5 from the left. In all cases, the excised pit had a history of recurrent or chronic drainage, or a history of recurrent infection. Pits were all removed during a quiescent phase of infection; no surgical excision was performed during an active infection.

In 3 of 13 cases the patient had a significant pre-excision infection complication, including localized cellulitis of preauricular skin (figure 1) and infection of the helical cartilage (figure 2). In these patients, a two week course of antibiotic therapy was given prior to surgical excision to quiet the infection, who have the sinus probed at time of surgery, and who have a cuff of cartilage inserted when the sinus tract extends to the cartilage. The sinus tract should be probed with a lacrimal probe or curette to ensure resection of all involved tissue. There were no postoperative complications. No recurrences were noted up to 3 year follow-up.

The typical presentation of a preauricular pit is an innocuous, asymptomatic cutaneous indentation anterior to the auricle. Specifically, the pit may be located at the anterior margin of the ascending helix.1-2,4 The sinus tract course is lateral and superior to the helix. The incidence is noted to be 0.1-0.9% in the United States, 0.47% in Hungary, 0.9% in England, 2.5% in Taiwan, and 4-10% in some areas of Africa.3-5 For most patients, it is asymptomatic and not an issue of concern. However, a large subset of patients note a history of recurrent infections with discharge that are painful and bothersome requiring evaluation and treatment.

DISCUSSION

The preauricular pit or sinus was first described in the German literature by Van Huisenberg in 1864. It is a benign congenital malformation that affects the soft tissues anterior to the root of the helix. The incidence is noted to be 0.1-0.9% in the United States, 0.47% in Hungary, 0.9% in England, 2.5% in Taiwan, and 4-10% in some areas of Africa.3-5 For most patients, it is asymptomatic and not an issue of concern. However, a large subset of patients note a history of recurrent infections with discharge that are painful and bothersome requiring evaluation and treatment.

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CONCLUSION

Preauricular sinuses or pits are often asymptomatic lesions associated with the anterior aspect of the auricle. The etiology is associated with auricular embryogenesis and can be either inherited or sporadic. Practicing otolaryngologists must be cognizant of associated syndromes, including branchio-oto-renal (BOR) syndrome. When preauricular pit or sinus complicated by infection, treatment of the active infection followed by surgical resolution is the appropriate and definitive treatment. When the sinus is fully probed and a cuff of cartilage is resected at time of surgery, the rate of recurrence is low.