PHOTO ESSAY

An Atlas of Lumps and Bumps: Part 15

Alexander K. C. Leung, MD[1,2]—Series Editor ▪ Benjamin Barankin, MD[3] ▪ Joseph M. Lam, MD[4] ▪ Kin Fon Leong, MD[5]

Accessory Tragus

An accessory tragus occurs when the auricle is formed from the fusion of 6 mesenchymal tubercles (hillocks of His) on the surface of the embryo. An accessory tragus results from a failure of proper fusion of the three hillocks of the first pharyngeal arch and incomplete or arrested migration along the line of the ascending pathway of the tragus from the lower lateral neck to the side of the head level with the eyes.[1-4] The global prevalence is estimated to be 0.1 to 0.47% of all live births.[4-6] There is no sex predilection.[7]

Typically, an accessory tragus presents at birth as an asymptomatic, solitary, skin-colored, sessile or pedunculated, soft or firm nodule **(Figures 1 and 2)**.[8,9] The nodule contains a bar of elastic cartilage.[4] The lesion is usually unilateral and located most commonly on or near the tragus

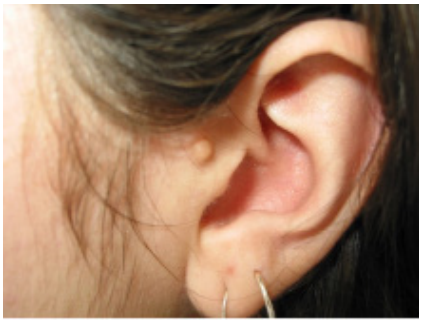

Figure 1. Accessory tragus presenting as asymptomatic, solitary, skin-colored, sessile or pedunculated, soft or firm nodule.

(Figures 1 and 2) and, less commonly, in an area along a line from the tragus to the angle of the mouth **(Figure 3)** or along the anterior margin of the sternocleidomastoid muscle.[3,4,9,10] Atypical locations include the nasal vestibule, middle ear, glabella, and the suprasternal area.[3,11,12] The number of accessory tragi can be solitary or multiple

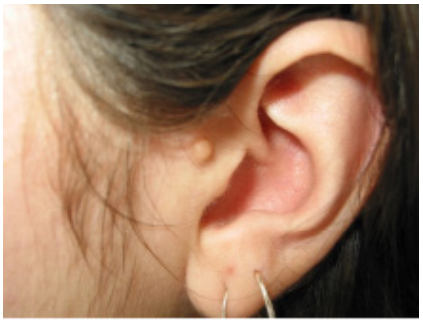

Figure 2. Accessory tragus presenting as asymptomatic, solitary, skin-colored, sessile or pedunculated, soft or firm nodule.

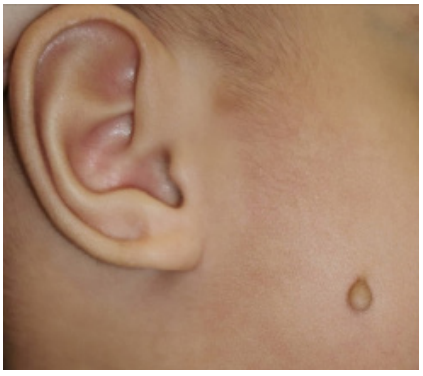

Figure 3. Accessory tragus in an area along a line from the tragus to the angle of the mouth.

(Figures 4 and 5).[4] Bilateral lesions are present in approximately 6% of cases.[5,13,14]

In most cases, an accessory tragus is an isolated finding. At times, it may be associated with anomalies of the first branchial arch such as cleft lip, cleft palate, and hypoplasia of the mandible. Accessory tragus may also be a feature of Goldenhar syndrome (oculo-auriculo-vertebral dysplasia), Treacher Collins syndrome (mandibulofacial dysostosis), VACTERL (Vertebral defects, Anal atresia, Cardiac defects, Tracheo-Esophageal fistula, Renal anomalies, and

AFFILIATIONS:
[1]Department of Pediatrics, University of Calgary, Calgary, Alberta, Canada
[2]Alberta Children's Hospital, Calgary, Alberta, Canada
[3]Toronto Dermatology Centre, Toronto, Ontario, Canada
[4]Department of Pediatrics and Department of Dermatology and Skin Sciences, University of British Columbia, Vancouver, British Columbia, Canada
[5]Pediatric Institute, Kuala Lumpur General Hospital, Kuala Lumpur, Malaysia

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CORRESPONDENCE:
Alexander K. C. Leung, MD, #200, 233 16th Ave NW, Calgary, AB T2M 0H5, Canada (aleung@ucalgary.ca)

EDITOR'S NOTE:
This article is part of a series describing and differentiating dermatologic lumps and bumps. To access previously published articles in the series, visit consultant360.com/resource-center/atlas-lumps-and-bumps.

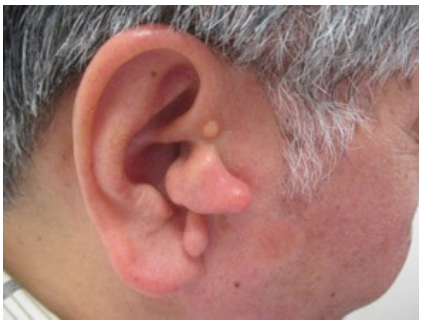

Figure 4. Multiple accessory tragus.

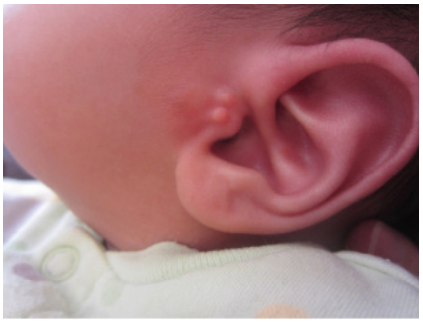

Figure 5. Multiple accessory tragus.

Limb abnormalities) syndrome, Delleman (oculocerebrocutaneous) syndrome, oto-mandibular dysostosis (hemifacial microsomia), Townes-Brocks syndrome, Wolf-Hirschhorn syndrome (4p- syndrome), Haberland syndrome, and Down syndrome.[1,9,10,15-17] This is especially so when multiple accessory tragi are present.[16,17]

Frostbitten Ears

Frostbite is an injury caused by exposing the skin and underlying tissues to freezing temperatures. The ears are most susceptible to frostbite. Frostbite presents initially as stinging or aching of the skin, which progresses to a cold, numb, and white area. After thawing, the affected site is painful, erythematous, edematous, and swollen **(Figure 6)**. If the damage is severe enough, the condition may progress to blistering, anesthesia/hyperesthesia, ulceration, or gangrene. Direct tissue damage occurs through the formation of intracellular and extracellular ice crystals. In addition, localized vasoconstriction causes an increase in viscosity of vascular contents and microvascular

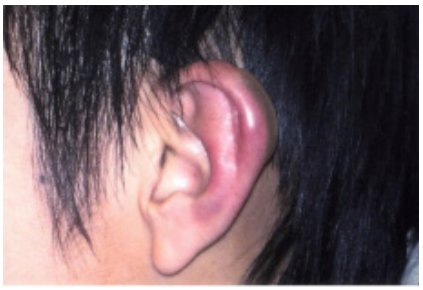

Figure 6. Frostbite presentation on ear with erythematous and swelling

damage. This may result in the formation of microthrombi with resultant ischemia.[18]

Earlobe Keloids

A keloid represents an excessive response of the dermis to cutaneous injury (eg, secondary to acne, piercing, or surgery).[19] Rarely, a keloid may develop de novo without a previous noticeable injury to the skin.[8] It is a benign hyperproliferative growth of dense fibrous tissue and overabundant deposition of disorganized, thick, hyalinized collagen.[20] Clinically, a keloid appears as a skin-colored to pink, red, or brown, firm nodule that extends beyond the margins of the original wound.[21] This is in contrast to a hypertrophic scar, which tends to stay within the margins of the original wound.

Earlobes are sites of predilection for the development of keloids **(Figures 7 and 8)**.[22] Ear piercing is by far the most common triggering factor for earlobe keloid formation in genetically predisposed individuals.[21,22] The condition is more common in individuals with more pigment in their skin.[22,23] There is also a familial predisposition to keloid formation.[5] The peak incidence is between 10 and 30 years of age.[19] At times, affected patients may complain of pain and itching discomfort.[20] The condition can have significant social and psychological impacts that negatively affect a patient's quality of life.[22,23]

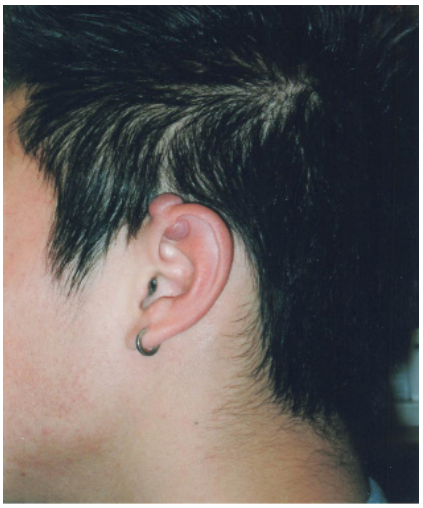

Figure 7. Earlobe keloid formation.

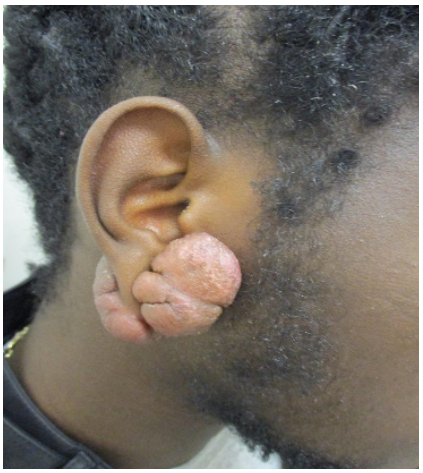

Figure 8. Earlobe keloid formation.

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