ACQUIRED AURICULAR CAULIFLOWER DEFORMITY IN A CHILD

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Case report. We report the case of a 7-year-old boy who presented with bilateral auricular deformity. He had no history of ear infection. He did not practice combat sports.

The child was transferred from the Department of Psychology. He had a history of bullying by classmates, caused by an abnormal appearance of both ears, more pronounced on the right side. Classmates laughed at the strange shape of his ears, a problem never reported during his time in kindergarten.

A thorough clinical examination was performed at the Department of Pediatrics, excluding any genetic cause or other underlying pathology that could be the cause of the ear deformity. The child was in good health.

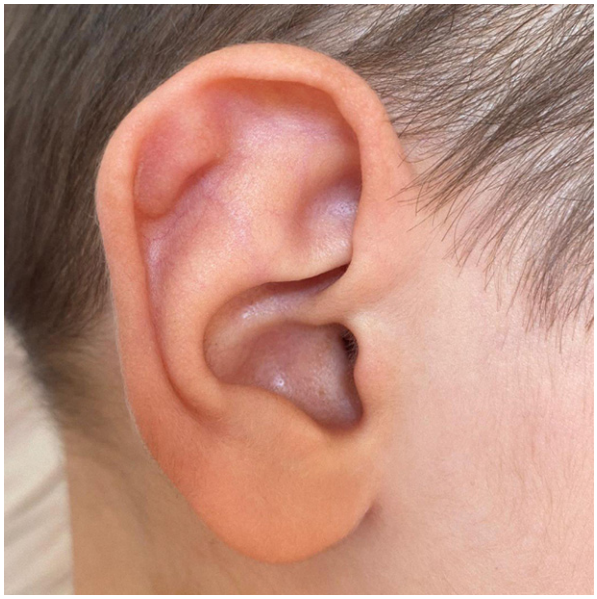

Fig. 1

Fig. 2

Fig. 1, 2: Cauliflower ear deformity type IA in a 7-year-old boy (Fig. 1). Cauliflower ear. Boxer of Quirinal (Fig. 2), Greek Hellenistic bronze sculpture of a sitting nude boxer at rest, 100-50 BC, Palazzo Massimo alle Terme, Rome (Public domain).

Dermatological examination revealed a visible, firm, well-circumscribed deformity in the cartilaginous region of the auricle, tender to palpation, in the absence of infection, hematoma, erythema, or obstruction. The covering epidermis was normal. No enlargement of the regional lymph nodes was palpable.

The diagnosis of cauliflower ear type IA was confirmed. Interviews with the child and parents revealed that the ear deformity was caused by mechanical punishment applied by family members and teachers.

The parents were informed of the cause of the disease. Prophylactic measures were recommended, such as avoiding ear trauma. Surgery was not accepted.

Discussion. The diagnosis of cauliflower ear is a clinical diagnosis. It is a permanent feature after chronic traumatic chondritis (hyperchondroplasia auris traumatica). Cauliflower ear most commonly occurs in the scaphoid and coffin fossae, but may also involve the concha. Posterior cauliflower ear is rare. Deformities can be classified into two main types. Type I deformities do not significantly alter the auricular contour, while type II deformities are characterized by significant distortion of the auricular contour. The various subtypes and their surgical correction are summarized in Table 1 (6).

Table 1: Classification of cauliflower ear deformities .

Type I
IA: The deformity is restricted to the concha.
IB: The deformity extends from the antihelix to the helix.
IC: The deformity extends throughout the auricle.
ID: A scar contracture prevents the skin from lying flat even after the cartilage deformity is resected.
Type II
IIA: The auricular cartilage retains structural integrity.
IIB: The remaining cartilage cannot support a normal-appearing auricle.

A review of the literature shows that acquired cauliflower ear is rare among infants and children (7, 8); bilateral involvement is common; some cases have been related to child abuse (9, 10).

The common differential diagnoses in childhood are auricular pseudocysts, infections, chondroma, dermatofibroma, hematoma, and keloid. In countries where leprosy is endemic, the lepromatous form is another differential diagnosis (11, 12). A rare diagnosis is diastrophic dysplasia, a genetic disorder caused by biallelic pathogenic variants in the *SLC26A2* gene, with cartilage abnormalities. Infants develop auricular involvement that subsequently leads to cauliflower deformity (13). Relapsing polychondritis, which carries an increased risk of cauliflower deformity, is a rare disease in pediatric age, (14).

Treatment is surgical, but more important is prophylaxis (7). If a fluctuant hematoma is present within the cartilaginous auricle within 7 days of the lesion, the hematoma should be removed by needle aspiration or incision and drainage, followed by a compressive pillow dressing. In children, antibiotic therapy for 7-10 days (e.g., amoxicillin-clavulanate) is currently recommended to decrease the risk of perichondritis (15).

Conclusion. The current case was presented because of its rarity in children and to discuss the differential diagnosis.

Conflicts of interest

The authors declare that they have no conflicts of interest.

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