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### **Clinical Report**

# Bilateral Embedding of Earring Backings in the Ear Lobules of a Teenager. A Report of a Case

Incrustation bilatérale de boucles d'oreilles dans les lobules d'un adolescent : à propos d'un cas

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#### RÉSUMÉ

Nous publions le cas d'une jeune fille de 12 ans qui a consulté pour corps étranger dans les lobules des oreilles. La chirurgie subséquente a trouvé qu'il s'agissait de boucles d'oreilles qu'elle s'était fait placer dix mois auparavant

#### **ABSTRACT**

We report the case of of a 12-year old female who presented with foreign bodies in her ear lobules, which happened to be the backings of her earrings discovered about 10 months after she wore them.

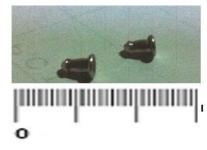
#### **CASE REPORT**

A 12-year-old patient whose ear lobules were gun-pierced at the age of two months was brought to our service for pain of the lobules evolving for five days prior to the consultation. According to the family, the girl had no metal allergy to their knowledge. The earrings were in place uninterruptedly for 10months. She had removed the anterior part but the backings were invisible. On physical examination, there was an inflammation located on the lobules and hard artefacts could be palpated under the skin.

We excised the lobules under local anaesthesia (**figure 1**) to find a little suppuration surrounding the backings of the earrings. We removed them (about 5 mm length) (**figure 2**), cleaned with normal saline and then we recreated the piercing by putting in place non absorbable suture for 14 days. We did wound dressing every other day. The patient healed uneventfully.



<u>Figure 1</u>: Per operatory View of the removal of the embedded backings of the earrings.



<u>Figure 2</u>: Postoperatory view of the backings measuring about 5 mm length.

#### DISCUSSION

Body ornamentation and especially ear piercing that were formerly considered ethnic practices, are nowadays widespread(1,2). The gun is mostly used in towns to pierce the ears for it is easy and requires very little training(3). It is done in pharmacies and private clinics. Other methods include sharpened needles and nails and even the earring itself amongst others in rural areas(3,4). However, ear piercing is not without risk. Olajide  $et\ al$ . in Nigeria and Fijakowska  $et\ al$ . in Poland report a minor complication rate of 20% and 20.5% respectively (4,5) while serious complications represent about 3%(5).

Complications that can arise from ear piercing include infection (chondritis), keloids, cervical lymph nodes, contact dermatitis, hematomas, lipomas, granulomas, squamous cysts, pseudolyphomas, lobe deformities and ear ring embedding(6). The latter usually occurs after the use of the piercing gun(7). However, this complication is rare. Olajide et al. had an incidence of 3.2% embedded earrings in their series(4). From their part, Timm et coll. found an incidence of 25 per 100,000 pediatric consultations between 2000 and 2005 in Cincinati in United states of America(3). The figure in Cameroon is unknown, but clinically it is a rare condition. Usually, the embedding occurs after an infection during the weeks following the piercing(3). Such a long period as that observed in the case report can suggest that any infection occurring over a piercing can lead to the embedding of the earrings.

Small rear fastening earrings seem to be more involved possibly because of their lesser size that facilitates their absorption. Antoszewski et al. described an embedded jewelry in the lower lip of a patient due to high pressure on soft tissues because of a stud shorter than the soft tissues of the lip(2). This mechanism is plausible in this case though we did not see the anterior part of the earrings to ascertain it. Other factors involved include bad piercing technique, poor asepsis, lack of personnel training and the piercing of little children(7). Muntz et al. and Antoszewski et al. identified childhood alongside with diabetes mellitus and thick fleshy earlobes as factors that predispose to embedding (7,8). For this reason, the American Pediatric Association recommends to postpone the piercing until the child can take care of himself(9). However, Lane et al. advise either to abstain from piercing or to pierce in the infancy or early childhood the ears of children in families prone to keloids(10).

In Africa, almost all girls have their ears pierced during the first months of life(4). Nonetheless, the embedding is rare clinically(2,4,5). Metals used in the constitution of the earrings may favour embedding in sensitive patients by locally irritating the skin. Various authors report rates of hypersensitivity reactions and contact dermatitis in patients wearing earrings higher than those of the general population(11,12).

#### **CONCLUSION**

Ear piercing is a widespread practice but it is not free from complications including embedding of part or whole earrings in the lobules. Thus, strict principles of asepsis and a watchful attitude must be observed during and after the procedure especially in children.

#### REFERENCES

- Fija\lkowska M, Pisera P, Kasielska A, Antoszewski B. Should we say NO to body piercing in children? Complications after ear piercing in children. Int J Dermatol. 2011;50(4):467–469.
- 2. Antoszewski B, Szychta P, Fija\lkowska M. Are we aware of all complications following body piercing procedures? Int J Dermatol. 2009;48(4):422–425.
- 3. Cohen HA, Nussinovitch M, Straussberg R. Embedded earrings. Cutis. 1994;53(2):82–82.
- 4. Gabriel OT, Anthony OO, Paul EA, Ayodele SO. Trends and complications of ear piercing among selected Nigerian population. J Fam Med Prim Care. 2017;6(3):517.
- Fija\lkowska M, Kasielska A, Antoszewski B. Variety of complications after auricle piercing. Int J Dermatol. 2014;53(8):952–955.
- Hendricks WM. Complications of ear piercing: treatment and prevention. Cutis. 1991;48(5):386– 394.
- 7. Muntz HR, Asher BF. Embedded earrings: a complication of the ear-piercing gun. Int J Pediatr Otorhinolaryngol. 1990;19(1):73–76.
- 8. Antoszewski B, Jędrzejczak M, Kruk-Jeromin J. Complications after body piercing in patient suffering from type 1 diabetes mellitus. Int J Dermatol. 2007;46(12):1250–1252.
- 9. Timm N, Iyer S. Embedded earrings in children. Pediatr Emerg Care. 2008;24(1):31–33.
- 10. Lane JE, Waller JL, Davis LS. Relationship between age of ear piercing and keloid formation. Pediatrics. 2005;115(5):1312–1314.
- 11. High WA, Ayers RA, Adams JR, Chang A, Fitzpatrick JE. Granulomatous reaction to titanium alloy: an unusual reaction to ear piercing. J Am Acad Dermatol. 2006;55(4):716–720.
- 12. Nakada T, Iuima M, Nakayama H, Maibach HI. Role of ear piercing in metal allergic contact dermatitis. Contact Dermatitis. 1997;36(5):233–236.