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Repair of gauge earlobe medium defect

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Introduction

Ear gauging has been performed for many centuries; however, in recent years, this practice has become more popular especially among young people. Consequently, there are also more cases of dilated earlobes that require surgery to correct. The plugs used to enlarge the piercing of the earlobe can cause major lobular deformations that no longer permit the wearing of classical earrings. Many people concerned by such deformations tend to seek surgical correction for social and professional reasons.

Surgical techniques for expanded earlobe defect repairs are not well described in existing literature. Moreover, the majority of such papers are focused on large defects [1–8] rather than medium defects [8–10]. In this article we describe a new and simple technique to repair those medium deformations due to ear gauging, which has produced excellent results on the earlobe shape.

Technique

Three patients were treated using this technique in 2018: 1 female and 2 males. All of them had extended earlobes as a result of wearing earlobe plugs for many years. The removal of the plugs left a deformation of the earlobes that could no longer naturally return to their normal shape (Fig. 1). They requested surgery in order to correct this deformation which they did not find attractive.

They were all asked to remove their plugs at least 2 months before the surgery, in order to permit some scar retraction.

The procedure was performed under local anesthesia (Lidocaine 1%). First the edges of the defect were de-epithelialized in order to create a new border (Fig. 2 and 3a). Then the rims were split to create 2 surfaces: anterior and posterior. The closure of the edges had then to be

realized in order to harmonize the shape of the ear lobe. This step was accomplished by transforming the circular hole into 2 crescents. To create these crescents, sutures had to be tied asymmetrically at the edges of the hole: we used a third of the edge of the hole and sutured it to the two other thirds using 4 stitches, which divided the difference of length along the 2 borders (Fib. 3b). On the anterior face of the ear lobe, the crescent had a medial concavity (Fig. 3c and 4), and as a result we used the medial third of the hole to stitch it to the 2 remaining thirds. On the posterior face of the earlobe, the crescent had an inferior concavity (Fig. 3d), so we used the inferior third of the hole to stitch it to the 2 remaining thirds. These crescents needed to be opposed (one vertical and the other horizontal) to recreate a regular rounded shape of the earlobe without causing any dog-ear deformity. Stitches were removed on Day 5.

Six months post operatively, the results were very satisfying with no complications reported (Fig. 5). All of them re-pierced their earlobes 1 to 2 months postoperatively without any ensuing issues. We recommended wearing light earrings for the first 3 months after surgery.

Discussion

The aim of this article is to describe a new surgical technique that could give a harmonious result to the overall shape of the earlobe with a natural curve along the inferior border. Indeed, the difficulty of this surgery lies in recreating normal volume and shape of the earlobe. The two opposite crescents that we propose produce a rounded earlobe with a tiny scar and no tissue loss.

Reconstructions of dilated earlobes have been described only in a few publications. The literature on this topic proposes different techniques depending on the degree of the dilatation

(Fig. 6). Generally, punch or primary closure are proposed for minimal defects [8]. Excision with advancement flaps are proposed for large defects [1,2,6,8] and enrolled or folded flaps are used for extra-large defects [3–5,7]. But medium deformities are rarely described despite the fact that these are the most frequent of gauge ear-piercing deformities. On those, Zeiderman suggested a double opposing perpendicular linear repair [10] while de la Sotta and Collins respectively described a technique based on the use of wedge excisions [9] and on a posterior-superior based advancement flap [8]. Most of these techniques are quite challenging and/or can result in asymmetrical earlobes.

In this article we provide an easy technique for repair of expanded earlobe medium defect with a long-term satisfying result.

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Figures

Fig. 1. Defect on the left earlobe after 2 month's removal of the plug

Fig. 2. Drawing of the de-epithelialization's area

Fig. 3. (a) De-epithelialization of the edges of the defect. (b) Transformation of a circular hole into a crescent: suture one third of the edge to the two other thirds. (c) Anterior closure of the defect with a crescent with a medial concavity. (d) Posterior closure of the defect with a crescent with an inferior concavity.

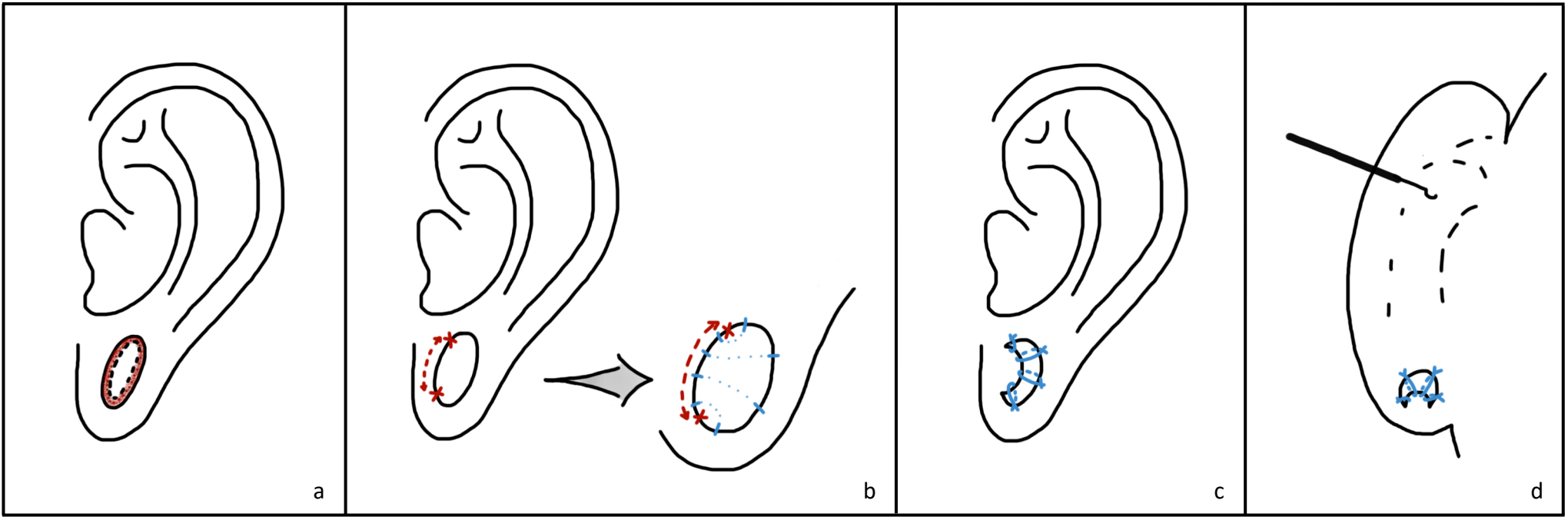
Fig. 4. Crescent suture on the anterior side of the earlobe

Fig. 5. Result 6 months postoperatively

Fig. 6. Literature review of the techniques of repair of medium, large and extra-large deformations of the earlobe

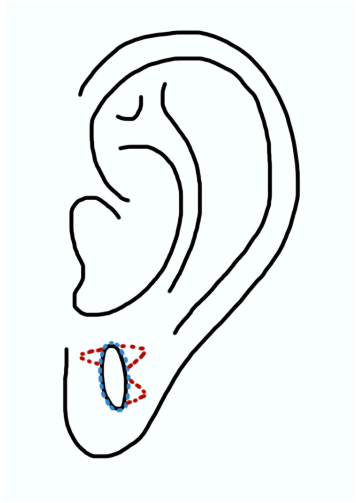
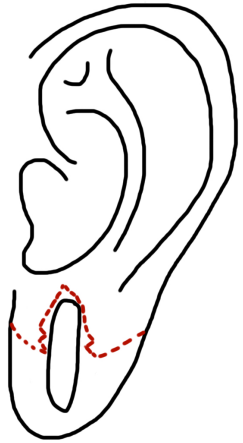
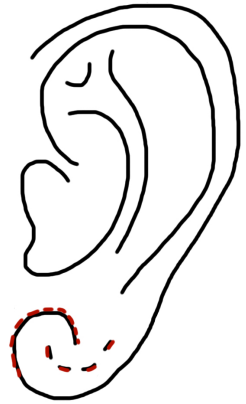
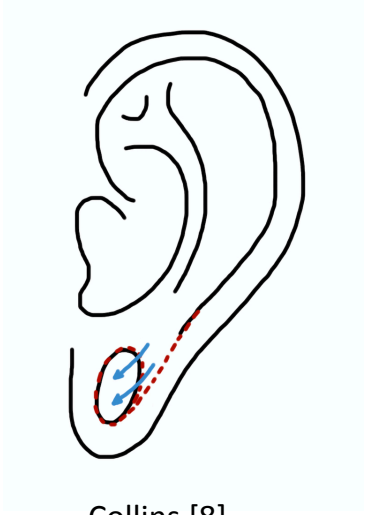
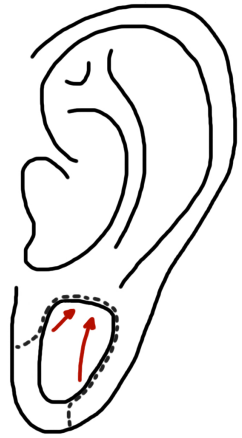
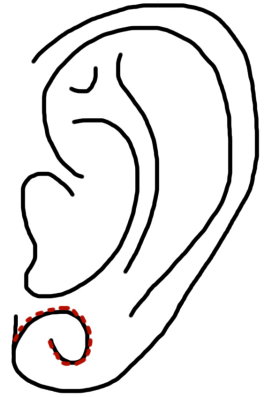
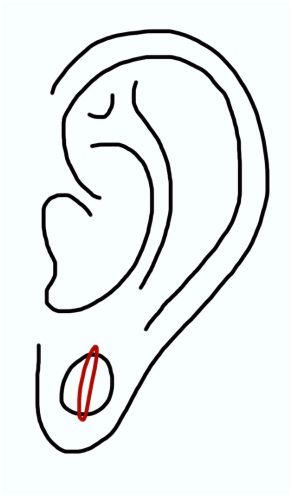
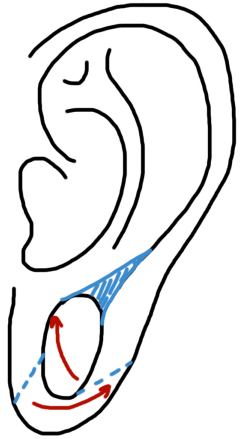
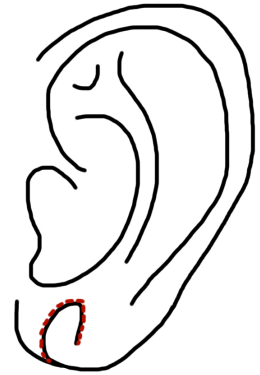
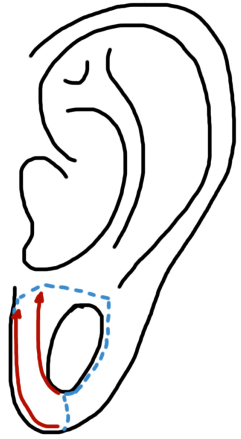





a
b
c
d





Medium Defects	Large Defects	Extra-Large Defects
 De la Sotta [9]	 Williams [2]	 Pek [7]
 Collins [8]	 Erhl [6]	 Arasaratnam [3]
 Zeiderman [10]	 Collins [8]	 Bastazini [4] and Snell [5]
	 Hendersen [1]	