there is no clear criteria for classification by size, classification into groups of 2 mm, 2-4 mm, and above 4 mm, or 3 mm, 3-6 mm, and above 6 mm is common. 2 mm and 3 mm have been found to be common sizes from these studies [1]. There is no absolute size of tori that indicates surgery, but the associated symptoms of growing tori can be an indication. The possible complications after surgery include hematoma, edema, wound dehiscence, and infection [1]. Our patient also had a thinned mucosal layer, so it was excorticated with care before closure, but wound dehiscence was observed after 6 days, so wound revision was conducted. After the revisional operation, the wound healed with no more problems (Fig. 3). This must be considered before planning surgery, and it is important to minimize morbidity on the lesion.

- 1. Garcia-Garcia AS, Martinez-Gonzalez JM, Gomez-Font R, et al. Current status of the torus palatinus and torus mandibularis. Med Oral Patol Oral Cir Bucal 2010;15:e353-60.
- 2. Jainkittivong A, Langlais RP. Buccal and palatal exostoses: prevalence and concurrence with tori. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2000;90:48-53.
- 3. Antoniades DZ, Belazi M, Papanayiotou P. Concurrence of torus palatinus with palatal and buccal exostoses: case report and review of the literature. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1998;85:552-7.
- 4. Choi Y, Park H, Lee JS, et al. Prevalence and anatomic topography of mandibular tori: computed tomographic analysis. J Oral Maxillofac Surg 2012;70:1286-91.
- 5. Jainkittivong A, Apinhasmit W, Swasdison S. Prevalence and clinical characteristics of oral tori in 1,520 Chulalongkorn University Dental School patients. Surg Radiol Anat 2007;29:125-31.

## **Earrings Embedded within Earlobe Keloids**

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Keloids are a proliferative ailment of fibrous tissue secondary to dysregulation in various wound healing processes [1]. The diverse phenotypes and multitude of factors that trigger keloid formation have led us to propose "keloid disorder (KD)" as the identifying name for this condition and the term "keloid" to be reserved for referring to each individual skin lesion that patients have. Although benign, KD can cause aesthetic and functional problems, all of which pose a



Fig. 1. A right earlobe keloid; sessile-type single nodular pattern based on Chang-Park classification (type II).





Fig. 2. A left earlobe keloid; sessile-type single nodular pattern based on Chang-Park classification (type II).

significant negative impact on the individual's quality of life. The earlobes are frequently involved sites for keloid formation following ear piercing, with an incidence of 2.5% [2]. Earlobe keloids are a cosmetic disfigurement that are challenging to treat with a relatively high recurrence rate. The increasing trend toward cosmetic piercing and multiple ear piercing suggests that treating ear keloids will become a more frequent part of plastic surgery practice. Diverse treatment modalities have been introduced with varying degrees of success. Various studies have estimated the onset of the disorder to be between 10 and 30 years of age [3].

We have been faced with several earlobe keloids with earrings embedded within them. A representative case is presented in Figs. 1-3. Without exception, the cases in the series can be classified as having a sessiletype single nodular pattern based on our novel classification (Chang-Park classification) [4]. We completely excised the keloidal tissue, adopting full thickness wedge excision, which is considered to be the optimal treatment in this morphologic type. The wounds were closed with the appropriate approximation using nylon 5-0 continuous sutures. A compressive wound dressing using hydrocolloid materials and magnets was applied [5]. Following appropriate wound man-



Earrings embedded within the earlobe keloids.

agement, the patients were instructed to use the magnets for 12 hours per day for 6 months until the therapy was completed. The purpose of this report is to remind the reader that earrings may be embedded in earlobe keloids. Clinicians should keep this possibility in mind when faced with earlobe keloids.

## References

- 1. Park TH, Park JH, Kim JK, et al. Analysis of 15 cases of auricular keloids following conchal cartilage grafts in an asian population. Aesthetic Plast Surg 2013;37:102-5.
- 2. Park TH, Seo SW, Kim JK, et al. Outcomes of surgical excision with pressure therapy using magnets and identification of risk factors for recurrent keloids. Plast Reconstr Surg 2011;128:431-9.
- 3. Tirgan MH, Shutty CM, Park TH. Nine-month-old patient with bilateral earlobe keloids. Pediatrics 2013; 131:e313-7.
- 4. Park TH, Seo SW, Kim JK, et al. Earlobe keloids: classification according to gross morphology determines proper surgical approach. Dermatol Surg 2012;38:406-
- 5. Park TH, Chang CH. Early postoperative magnet application combined with hydrocolloid dressing for the treatment of earlobe keloids. Aesthetic Plast Surg 2013;37:439-44.