

## **Short Report**

### **Metal splints for ear keloids recurrence; experience in 10 cases**

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## **ABSTRACT**

**Objective:** To determine the effect of metal splints on ear lobe keloid recurrence after surgical excision.

**Methods:** The study was conducted in Holy Family Hospital, Rawalpindi and POF Hospital, Wah Medical College (WMC), Wah between July 2004 and April 2007. Ten untreated female patients of ear lobe keloid secondary to ear lobe piercing had surgical excision followed by wearing metal splint for 6 months. All patients were followed for one year for recurrence.

**Results and conclusion:** Not a single patient had recurrence. We strongly recommend surgical excision followed by metal splints wearing for 6 months. They are comfortable and have excellent compliance. (Rawal Med J 2007;32:197-198).

**Key Words:** Metal splints, pressure splints, ear keloid

## **INTRODUCTION**

Keloids are dermal fibrotic lesions which are considered an aberration of the wound healing process. Their etiology and pathogenesis are poorly understood.<sup>1</sup> Keloids of ear are very common condition especially after piercing of ear in women. There are many treatments of keloid from radiation to surgery and even chemotherapy but no one method has been found completely successful. However, surgery is the most common modality for the treatment of Keloid with more than 50% recurrence rate. Pressure application is a common post operative technique.<sup>2,3</sup> Much is written about prevention of ear lobe keloid and it was concluded that no one therapy is ideal. Use of various drugs after surgical treatment has been recommended starting from steroids, verapamil, chemotherapeutic agents as 5 fluorouracil, doxorubicin, Bleomycin and many other drugs.<sup>4</sup> Objective of this study was to determine the effect of specially designed metal splints after surgical resection of ear lobe keloids.

## **MATERIAL AND METHODS**

The study was conducted in Holy Family Hospital, Rawalpindi and POF Hospital, Wah Medical College, Wah Cantt from January 2004 to January 2007. Method of sampling was purposive. It was a simple descriptive study, of 10 cases with ear lobe keloid due to ear piercing. Females with age between 15 to 30 years were included in the study. Recurrent and previously treated keloids and those with any systemic disease were excluded. Ten patients were selected and surgical resection of lesion was followed by specially designed metal splint, as shown in figure 1 put on for a period of four months in all cases. Patients were followed for the period of one year for recurrence..

## RESULTS AND DISCUSSION

None of the ten patients developed recurrence after resection. One of the patients developed an ulcer on the site. No other complication was seen. All patient worn it comfortably and had excellent compliance and accepted the pressure splints.

There are many treatment modalities of keloids especially of ear. It ranges from steroid injection, pressure application, resection, laser resection, cryosurgery and different local application and even radiation therapy. When steroid injections have failed, the most common approach for the treatment of earlobe keloids is surgical excision. The carbon dioxide laser has recently been used with varying success in the treatment of keloids and hypertrophy scars.<sup>4</sup> In one study, one ear lobe was treated with laser excision and other with scalpel excision both had recurrence.

Combination of treatments decreases the recurrence rate of ear lobe keloid. Many studies showed use of surgical excision followed by steroid injection<sup>5</sup> and later application of pressure device.<sup>6</sup> Use of 5% imiquimode cream after surgical excision reduced the incidence of keloid recurrence.<sup>7</sup>

**Fig. 1. Specially designed metal splint.**



We selected cases which were untreated and were willing to wear ear splints for six months. All patients wore it comfortably in addition compliance was excellent. Only problem was pressure wound in one patient, which also healed on removing splints for days. In conclusion, we strongly recommend combination of excision, whether surgical or laser, followed by use of metal splints.

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