

Keloids of the Ear

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Keloid has been a fascinating problem for the Surgeons, elusive in its aetiology and wholly inadequate in treatment, so much so it has come to be known as the 'nightmare' of the Plastic Surgeons. During the past century and a half little have been gained in the way of an ideal treatment. This is not to say that little has been written on the Subject. On the contrary, there are about 200 publications in literature. Many are of course concerned with therapy and there have been many different methods of treatment recommended at one time or other. Among these, to mention a few, irradiation (Levitt-1951), corticosteroids (Conway and Stark-1951) hyalase injection (Cornbleet-1954), cryosurgery and surgical excision with or without irradiation are some of the popular methods of treatment. The selection of cases for the different modes of treatment have to be decided on the age of the patients, site of keloids, maturity of keloid, and availability of drugs. It has been our practice to do excision of keloids of the ear with pre and post-operative superficial X-ray therapy. Purpose of the present study is to assess the therapeutic value of this treatment for keloids of the ear.

25 keloids (11 patients with keloids on both sides and 3 patients with keloids on one side) were treated by this

method. All the excised keloids were examined histopathologically and careful study of serial section was made with a view to detect any foreign body in it.

Age : Age varied from 13 years to 22 years, average being 17.1 yrs.

Sex : All were females except one who was a boy of 14 years. Two patients were married and both of them gave history of rapid enlargement of keloids during pregnancy (Fig. 1). This may be a valuable point



Fig. 1 Patient who gave history of rapid increase in size of Keloid during pregnancy.

in favour of a hormonal influence in the development of keloids. Cosman et al. (1961) and Edgerton et al (1951) have remarked upon this point. In a series of 72 cases of keloid on

different parts of the body studied in this Unit, male to female ratio was 17:23. But keloids of the ear was mostly seen in women as piercing the women's ears is very common.

Colour of Skin : 7 patients were of dark complexion, 3 fair and 4 in between the two.

Complaint : The main complaint of the patients with keloid of the ear was swelling i.e. purely cosmetic, whereas the major complaints of the other patients with keloids elsewhere were itching and pain.

Nature of onset : All had injury from pricking of the lobule.

Duration : Shortest duration was 1 year and longest 3 years.

Family History : Two patients gave a positive family history of keloids.

Other Keloids : Four patients had keloid in other parts of the body, whereas 80% of a series of 72 cases of keloids elsewhere in the body studied had multiple keloids over the body.

Previous Operation : 8 patients had surgical excision done elsewhere before reporting to this Unit. Of these, two were operated more than once. One patient had split skin grafting done after partial excision of keloid. One patient had a series of hyalase injections into the keloid of the lobule.

Site : All patients had a keloid on the ear lobule except one who had it on the helix.

Management : All cases were given a course of superficial X-ray (Chaul's Therapy)

200r daily for 3 consecutive days for each site before operation and 200r daily for another 3 days postoperatively. Postoperative course of irradiation was started 48 hours after operation. Total dose was 1200r.

Surgical Excision : 10 cases were operated under general anaesthesia and 4 under local anaesthesia. Keloid was excised completely with a fringe of normal tissue surrounding it. Meticulous care was taken to handle tissue gently, and to achieve haemostasis. No buried sutures were left behind and skin was sutured with fine 5-0 silk. Stitches were removed by 6th day.

Two patients had wide infiltrating type of keloid in the ear lobule so that reconstruction of the ear lobule after excision of entire keloid was not possible without raising a flap from post auricular region. In both these cases, postoperative irradiation was given to the donor site as well.

Antibiotics : All patients were given a course of systemic penicillin for 6 days to prevent infection.

Follow-Up : Patients were followed up for six months to three years. 9 patients had excellent results (Fig. 2a, 2b, 3a, 3b). 2 cases had slight induration of the scar which was noticed 4-5 months after excision. A second course of Chaul's therapy was therefore given for these two cases, One had recurrence, the size of which had reached to 1/6th of the previous size (Fig. 4a, 4b).

Two patients had thickening of the suture line, but they were happy with the result.



Fig. 2 (a)—Preoperative photograph showing keloids of both ears.



Fig. 2 (b)—Postoperative photograph after six months.



Fig. 3 (a)—Preoperative photograph of Keloid ear.



Fig. 3 (b)—Postoperative photograph after two years.



Fig. 4 (a)—Preoperative photograph showing Keloid ear.



Fig. 4 (b) Postoperative photograph after two years showing recurrence of keloid.

Summary

Keloids of the ear, particularly of the ear lobule are suitable for excision. Pre-

operative and post-operative irradiation helps to reduce the incidence of recurrence of keloid.

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