



GANGRENOUS EAR LOBE KELOID FOLLOWING TRIAL OF SELF-AMPUTATION BY SCALP HAIR: A CASE REPORT

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ABSTRACT

Keloid is an aberrant wound-healing process that results in the production of benign fibroproliferative tissue following trauma, surgical procedures, or burns. The most common sites are shoulders, chest, back of the neck, and earlobes. They often present as firm nodules with itching and intermittent pain. Keloids are difficult to treat, though various treatment modalities are available and do not regress spontaneously. Gangrenous earlobe keloid caused by a self-amputation attempt, probably exacerbated by poor healthcare literacy, necessitates rapid intervention to avoid future complications such as sepsis and septic shock. Here we present a case of gangrenous earlobe keloid in a 15-year-old girl following a self-amputation attempt with scalp hair and was treated by emergency excision of the keloid.

KEYWORDS

INTRODUCTION

The term keloid was first used in the 1800s as "cheloid," which is derived from the Greek word "chele," which means "crab claw." Keloids spread beyond the wound's edges and infiltrate normal skin(1). Keloid development is roughly 15 times higher in highly pigmented ethnic groups than in whites. The pathophysiology of keloid scar is complicated, involving both genetic and environmental variables(2). The most common sites are shoulders, chest, back of the neck, and earlobes. They often present as firm nodules with itching and intermittent pain. Ear lobe keloids are common after ear-piercing, particularly on the posterior aspect of the ear lobe. Ear lobe keloids have a psychosocial influence on patients because of cosmetic concerns. People with low literacy and awareness in rural areas attempt to self-amputate keloids out of fear, resulting in catastrophic complications such as sepsis. Here we present a case of gangrenous left earlobe keloid in a 15-year-old girl following a self-amputation attempt with scalp hair. Emergency excision of the keloid was done without any complications.

CASE REPORT

A 15-year-old girl hailing from rural area came to our outpatient department with complaints of severe pain, fever, and swelling at the left earlobe for 2 days. She developed a nodular mass from the left ear piercing site 2 years ago associated with itching and intermittent pain. The swelling was slow-growing and cosmetically unappealing. A diagnosis of keloid was made in our hospital in a previous visit, and surgical excision of the left earlobe keloid under local anesthesia was advised. There were no other medical or surgical histories. Because of cosmetic concerns and fear of undergoing surgical procedures, her parents tried to self-amputate the swelling with her scalp hair wound around the origin of the swelling to restrict the blood circulation. She developed severe pain, redness, fever after 4 days of self amputation attempt and visited us again.

On general examination, the patient was conscious, oriented, and febrile with a temperature of 100.4 degrees Fahrenheit. Physical examination showed a tender, firm, reddish-black mass at the left earlobe piercing site with intact scalp hair wound around the mass. Hair was stuck with the mass and couldn't be removed (Figure A and B).



Figure A: Reddish Black Gangrenous Left Ear Lobe Keloid With Scalp Hair Wound Around The Origin Of The Keloid



Figure B: Gangrenous Left Ear Lobe Keloid With Intact Scalp Hair Wound Around.

A diagnosis of gangrenous left earlobe keloid was made, and the patient was shifted immediately to the operating theater for emergency excision under local anesthesia. Blood investigations were sent, which showed a high white blood cell count, and other parameters were normal. Under aseptic precautions, complete excision of the gangrenous left earlobe keloid was done with a size 15 scalpel under local anesthesia. The excision site was sutured with 4-0 Ethilon.

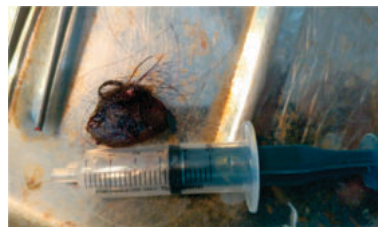


Figure C: Excised Gangrenous Left Ear Lobe Keloid With Intact Scalp Hair

Betadine and a piece of gauze dressing were given. Postoperatively, the patient was treated with intravenous antibiotics (injection amoxicillin + clavulanic acid 1.2 gm twice a day) and analgesics for 3 days. The patient was discharged on postoperative day 3 without any complications. Sutures were removed on postoperative day 9. After 3 weeks of suture removal, 10 mg/1 ml intralesional triamcinolone acetonide were given at the suture site at a 4-week gap for four visits. The patient was followed up for 1 year, and there was no recurrence.

DISCUSSION

Keloids are dermal fibro proliferative disorders unique to humans,

characterized by excess deposition of collagen in the dermis and the subcutaneous tissues(3). Simple total excision of a keloid stimulates additional collagen synthesis, thus prompting quick recurrence of a keloid, even larger than the initial one. For this reason, intra-marginal surgical excision of keloid tissue is recommended to prevent the stimulation of additional collagen synthesis(4). Earlobe keloids are commonly seen as shiny, smooth, globular growths on one or both sides of the earlobe. To lower the recurrence rate and obtain a better clinical outcome, ear keloids are treated with surgical resection supplemented by one or more adjuvant therapies such as radiation, steroid injection, laser, cryotherapy, platelet-rich plasma injection, and pressure therapy(5). Rural people seek home treatment due to their fear of undergoing surgery. In our case, the patient's parents tried self-amputation of the earlobe keloid because they were unaware of the condition and its risks leading to gangrenous formation.

CONCLUSION

Access to healthcare and information may be restricted in rural regions; therefore, awareness campaigns are critical for educating people about keloids, their causes, and possible treatment choices to prevent complications. Combined therapy is preferable over monotherapy to prevent recurrence.

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