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BILATERAL PERICHONDRITIS OF PINNA FOLLOWING PIERCING OF HELIX – A CASE REPORT

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<u>Abstract</u>

Piercing of Helix of pinna is a social custom of certain communities in Northern Tamil Nadu. Such a "high helical" piercing is well known to cause Perichondritis of Pinna. Most of the times such a Perichondritis is unilateral. Here we present a case of Bilateral Perichondritis of pinna, following ear piercing, first time from India subcontinent. We also highlight some practical points on management of such cases.

Case Report

An adolescent girl presented to SLIMS, ENT out Patient Clinic with history of pain and swelling in both ears since 15 days, she revealed that she had undergone ear piercing by a village elder. Her parents had arranged for this as she was nearing her marriageable age. She told that is was custom





womenfolk in her community to

have the helix pierced, in addition to usual lobular piercing practiced everywhere. A rusted nail was used for piercing the helix, after which Calatropis [called *erukan/Kalli chedi-Tamil Milky/resinous weed]* twig was inserted into the helical aperture thus made. She did not give any history suggestive of Diabetes mellitus.

On examination she was afebrile and swellings of helices of both pinnae was noted, [Fig 1] with multiple discharging sinuses on the posterior aspect of both pinnae. [Figure 2 and 3]





Swabs from the draining sinuses were sent for Gram stain, Culture and sensitivity. Debridment and cleaning in our Septic operation theater was done. Tentatively patient was put on intravenous Cefotaxime and Metronidazole. Culture report was obtained after 3 days, showed growth of Staphylococcus aureus, from both ears, which was sensitive to Amikacin and Cefotaxime. Biopsy of the sinus revealed non specific inflammation with polymorphic infiltrate of the tissue. Daily cleaning and dressing was done with Soframycin. A second time debridement was done at 1 week. After 8 days of Intravenous antibiotics patient was discharged. Patient is under follow up till date, 3 months ,and has thickening and scarification of Pinna cartilage as a deformity.

Discussion

Perichondritis of Auricle is a serious infection which can rapidly destroy the cartilage and cause deformity.(Ref 1) Piercing of Helix of Pinna is a social custom of certain communities in Northern Tamil Nadu. Such a "high helical" piercing is well known to cause Perichondritis of Pinna. (1) Most of the time such a Perichondritis is unilateral. (2) A literature search in Pubmed [http://www.ncbi.nlm.nih.gov/] did not reveal any reported case of Bilateral Perichondritis of Pinna following high ear piercing.

Most of the papers on ear piercing are from South America,(4) this is the first paper on Bilateral Perichondritis from India. Bilateral Perichondritis has been reported only in Diabetics (3). Majority of the cosmetic piercing is done on Lobule which carries no risk of Perichondritis. "High helical Cosmetic" piercing has high risk of developing infection because of violation of the cartilage, stripping of the Perichondrium, avascular necrosis of the devascularized cartilage, finally neo

cartilage formation leading to cauliflower ear or lop ear deformity. (4) In addition such a procedure is carried out using septic instruments like rusted nail. Wound is cleaned using milk of poisonous Calatropis plant [kalli / erukan chedi], which is believed to have medicinal properties. This is compounded by peer pressure and social compulsion of marriage.

Most frequent organism isolated, as reported in western literature, in such cases is Pseudomonas, lesser extent Staphylococcus, since the host factors are different in India.(1,5) Staphylococcus seems to be the most common agent responsible for the infection, as predicted by similar cases presenting to us. This remains to be followed up in sequential studies.

Conclusion

Perichondritis of Pinna is common following trauma, this can be surgical or accidental. Staphylococcus seems to be the common bacteriological agent responsible for Perichondritis of Pinna due to high helical cosmetic piercing

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