

Three ways of surgical treatment performed and compared with each other. The first group; treated by just stab wound drainage (20 ears), this performed just for pus drainage to relief pain until preparations for excision under general anesthesia were completed the recurrence rate in this group was 100% of the stabbed cases

The second group; treated by limited wound excision (20 ears) under general anesthesia in which the suspicious tissues were left unexcised, the recurrence rate was 85% of the excised cases.

The third group; treated by radical wound excision (70 ears), in which no suspicious tissues left behind the recurrence rate was 10% of the excised cases.

From this study we have found that the recurrence of chondritis is high in limited excision and low in radical excision; this because of inadequate excision of the abscess cavity leaving behind some infected and necrotic tissues which will result in further multiplication of infecting bacteria, and reaccumulation of pus and further damage to the cartilage and soft tissues, and reappearance of other clinical pictures; this finding corresponds with other studies performed in different countries<sup>(8,9,16)</sup>.

*Pseudomonas aeruginosa* found to be the most common bacteria that is because in our burn units the most common bacteria is *pseudomonas* and as a consequence of hospital acquired infection. Suppurative chondritis found to be due mostly to this microorganism; this finding corresponds with other studies in different localities in the world<sup>(18,11)</sup>.

Deformity of the auricle is found to be in the majority of cases of moderate to severe deformities that's because of the nature of the disease process which is well known that once it start it is very difficult to stop and usually result in catastrophes; these findings corresponds to other studies accomplished in different sites worldwide<sup>(8,9,18)</sup>.

In addition to these factors, the compliance and cooperation of our patients and their companions concerning positioning to avoid

pressure on the ears and taking medications and timing of surgeries were poor which will be reflected on the severity of the infection and deformity.

## Conclusion

Suppurative Chondritis of burned ear is a devastating complication which once occurred is difficult to treat. Prevention of suppurative chondritis is far better than treatment of established infection.

In spite of all precautions and ways of treatment systemically and locally, and in spite of all what has been written and we believe that it is a preventable complication, nobody can predict which ear will develop chondritis and which will not. No evidence for the role of prophylactic antibiotics in prevention of chondritis.

Surgical treatment of chondritis should be of radical excision without leaving any suspiciously non-viable cartilage and other tissues otherwise recurrence rate will be very high. Once chondritis occurred the auricle will never return to normal and result in deformed misshapen shrunken auricles.

## References

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