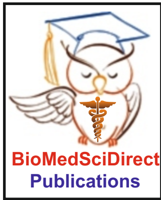

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Original Article

Title: A conservative approach in the management of auricular pseudocyst

Soundara Rajan G[a]*, Senthamarai Kannan D [b], Narendra Kumar V[c]

[a]*Associate Professor, Govt. Villupuram medical college*
[b]*Associate Professor, Govt. Chengalpattu Medical College*
[c]*Assistant professor, Govt. Chengalpattu Medical College*

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ABSTRACT

Background: Eventhough various treatment modalities are available for auricular pseudocyst, the location and pathogenesis ushered newer concepts. Aim: To assess the effect of steroid injection after aspiration of pseudocyst and reaspiration of injected steroid after stipulated time duration. Methodology: During the four years study period we assessed 28 patients attended OP with auricular pseudocyst and treated by giving steroid injection after aspiration of pseudocyst and reaspiration of injected steroid after stipulated time duration (approximately 30 mins). Results: 92.8% showed improvement with one sitting and had neither recurrence nor complications. Remaining 7.2% needed 2sittings. Conclusion:Steroid injection was used based on the pathogenesis of seroma and to arrest it in an early stage. In our study reaspiration of the injected steroid was as effective as other methods and does not require positive or negative pressure application.

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Methodology:

The aim of the treatment is to drain the pseudocyst without any damage to healthy cartilage and prevent recurrence. This study was conducted among patients who had attended ENT OPD, Government Chengalpattu medical college hospital from Jan 2015 to Dec 2019. Cases presented with first instance without history of trauma or pain were taken for study. Patient age ranged from 16 to 45 years. With proper aseptic precaution the cyst is aspirated, with 2ml syringe and the volume of the fluid aspirated ranged from 0.5ml to 2ml. Without removing the needle we injected 1ml of intralesional triamcinolone (10 mg /ml) and advised the patient to wait for 30 mins with needle insitu. After 30 mins the steroid was aspirated. Antibiotics, anti inflammatory and antihistaminics were given for 1 week. Patient was reviewed after 24 hours and was advised to come for followup after 1 week, 2 weeks, 6 weeks and after 3 months. If there was collection, the procedure was repeated.

Results:

A total of 28 patients were treated among which 27 were male and 1 was female (Fig-1). Most patients are in the age group of 26-35 (Fig-2).Steroid injection therapy was successful in all the patients although there was recurrence in 2 patients after 2 weeks which required repeat procedure (Fig-3). No complications were noted in all our cases. Fig 4 & 5 depicts the result.

Discussion:

Several treatment modalities have been described in the literature with variable results, but the ultimate goal of the treatment should provide best cosmetic outcome for the patient while using minimal invasive technique that provides no recurrence. Various treatment modalities includes simple aspiration, aspiration and pressure dressing, aspiration with intralesional steroid, aspiration with oral steroid, incision and drainage with removal of anterior cartilage leaflet with buttoning, splint suturing, glove drain incision[5].

A study by Zhang[6] et al concluded that auricular pseudocyst can be divided into early period (acute exudative period), middle period (cartilage formation period) and late period (proliferative and organized period). The treatment should be based on the pathological findings of the auricular pseudocyst. Elevated LDH isoezymes 4 & 5 levels were present more in the seroma fluid as compared to serum levels. LDH was released by ongoing cartilage disruption and seroma was considered to be a pattern of

* Corresponding Author : **Dr. G.Soundara Rajan M.S(ENT), DNB,**
Associate professor,
Dept. of ENT, Govt.Villupuram Medical College, Villupuram - 605601.
Mob: 94432 56695
Mail id : soundarent@gmail.com

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chondromalacia. Ongoing cartilage neogenesis at the root of the cyst, lymphocyte infiltration and fibrous deposition at later stages prompted the use of steroid injection to halt such pathogenesis in preliminary and initial recurrences[7,8].

The effectiveness of triamcinolone in the treatment of seroma has been documented in earlier studies[9]. In our study we used triamcinolone acetate 10mg/ml infused into cavity postaspiration. Triamcinolone prevents cartilage neogenesis which if formed might render the seroma at a later stage only to surgical deroofing[7].

In our study the volume of the fluid aspirated from the auricular pseudocyst ranged from 0.5ml to 2ml. In patients with recurrence there is a correlation between the size of the cyst and recurrence. The larger the cyst, recurrence is common, so we repeated the procedure.

Various other agents such as minocycline, antitumour glycopeptides Pingyangmycin were also tried intralesionally as an alternative to steroids[10]. We believe that intralesional steroid injection therapy should be the first line of therapy for the treatment of auricular pseudocyst. If the patient suffers more than 3 recurrences, surgical procedure can be considered.

Legends to Figures:

Fig- 1: Sex Distribution

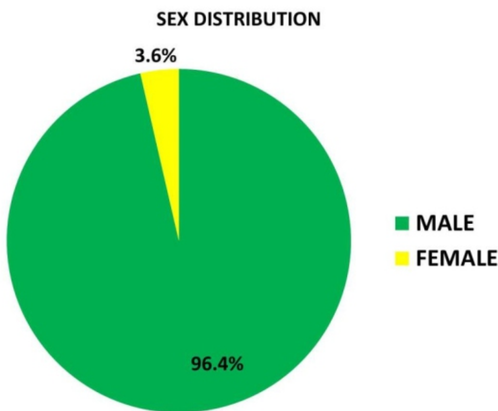


Fig- 2: Age Distribution

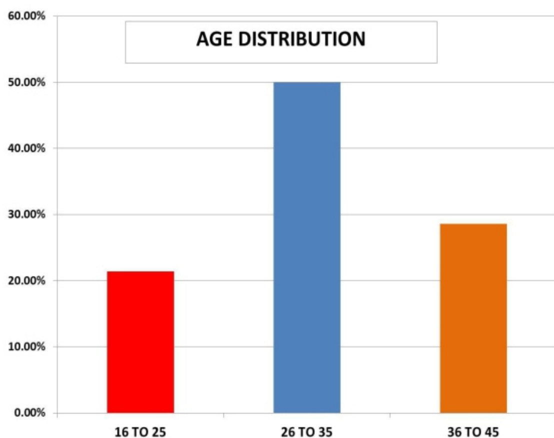


Fig-3: Success Rate

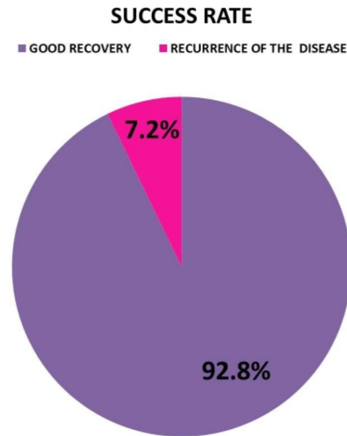


Fig- 4: Clinical picture before treatment

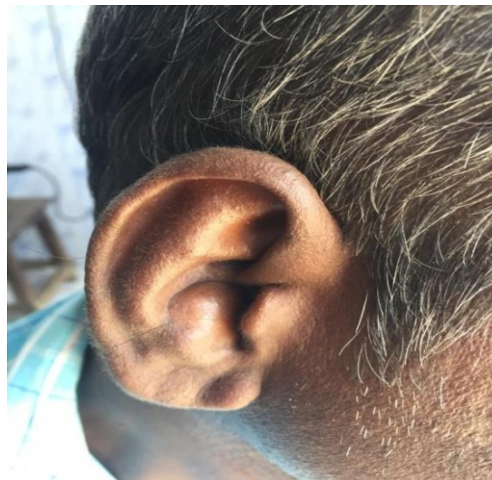
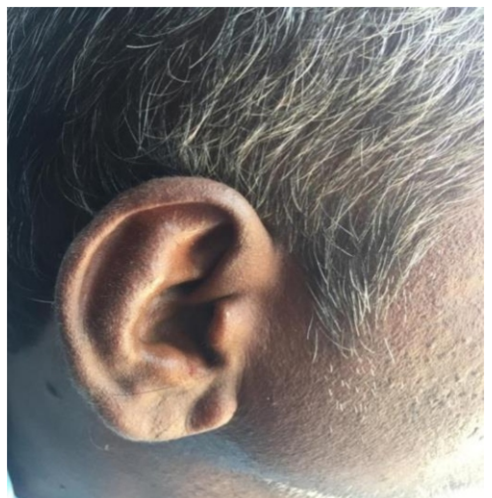


Fig- 5: Clinical picture after 6 weeks of treatment



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