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CONSERVATIVE MANAGEMENT OF PAROTID SIALOCELE :- A CASE REPORT

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ABSTRACT

The collection of the saliva in the soft tissue plane is termed as sialocele. When this communicates with the skin and drains it is known as parotid fistula. Sialocele occurs due to injury to the parotid gland parenchyma or duct, this result in accumulation of saliva in periglandular and glandular tissues or in subcutaneous cavity. In this article we report a case of Parotid sialocele formation following inadvertant incison given for space infection in parotid region. We followed conservative treatment and got excellent result.

INTRODUCTION:-

The parotid gland is the largest of the salivary glands weighing approximately about 15 to 30 g. [1] Duct of parotid gland, that is stensen's duct is about 5 cm long. The injuries to the duct of the salivary gland leads to the extravasation of the saliva in the soft tissue. The collection of the saliva in the soft tissue plane is termed as sialocele. Sialocele can develop into significantly large facial swelling and ultimately leads to fistula formation. Sialocele occurs because of injury to the salivary gland parenchyma or duct, this end in accumulation of saliva in periglandular and glandular tissues or in subcutaneous cavity.[2] Whenever the accumulated saliva communicates with overlying skin and drains it is termed as parotid fistula.[3] The discharge is watery and is related to meal as it is aggravated during the meals. Generally it is asymptomatic but it may become symptomatic if secondarily infected, and discharge becomes purulent in nature.

It is an acquired lesion due to trauma from sharp penetration objects, it can also occurs as a rare complication following TMJ surgery, open reduction of condylar fracture, parotid abscess drainage, parotidectomy.[4-5] There are different diagnostic imaging technique to evaluate salivary gland anomalies like sialography, ultrasonography, Doppler ultrasound and colorflow imaging, Radionucleotide scanning, CT scan, MRI scan, Arteriography, Positron emission tomography, fistulogram and histopathological examination like Fine needle aspiration cytopathology (FNAC), Incisional biopsy.[3,6] The diagnosis of the patient in our case involves any traumatic or surgical history, clinical examination, Fine needle aspiration cytology. There are different treatment options available to treat sialocele. This paper presents a case report of sialocele which is successfully managed with conservative approach.

CASE REPORT:-

A 84 year old male patient had a history of buccal space infection of left side of face. He went for extraction with #27 followed by extra oral incision and drainage. The incision which was given by local doctor is inadvertent in parotid region, which led to the injury of parotid glandular structure, ductal system which results in parotid effusion. Patient presented with swelling 6×5cm. On palpation swelling was fluctuant, intraorally no salivary flow was observed. (Figure 1 & 2)

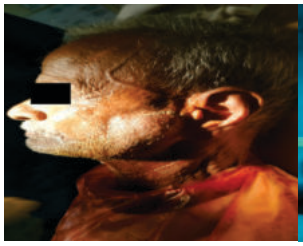

Figure -1 Preoperative Photograph Of Patient Showing Swelling On Left Side Of Face

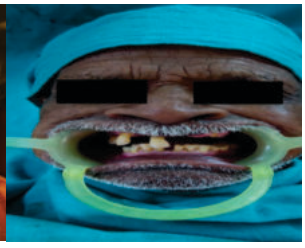

Figure -2 Preoperative Photograph Of Patient Showing Mouth Opening

Needle aspiration of swelling yielded 6ml of fluid. It was clear, straw colored with watery consistency. The diagnosis of salivary fluid was confirmed by elevated salivary amylase content (18000 U/L) of aspiration fluid. (Figure 3)

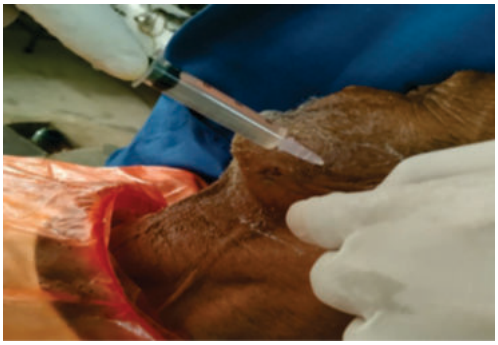

Figure -3 Photograph Showing Aspirated Fluid

Patient was instructed to have bland diet, compression dressing was placed. Tab. Amoxycilline+Potassium clavulanate, Tab. Betamethasone 0.5 mg and Muscle relaxant Twice daily for one week .The medication Tab. Betamethasone

and Muscle relaxant was continued for another 1 week. In every 3-4 day aspiration and pressure dressing was placed. We did followup of patient for 3 months and found that after 2 week significant reduction in swelling was observed. By the end of 3rd week swelling completely subsided. Mouth opening increase from 6mm to 22mm, in 3 month follow-up period. Healing of fistula tract was uneventful. (Figure 4 & 5)

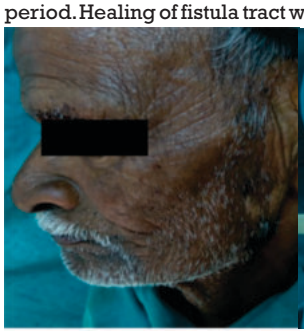

Figure -4 Postoperative Photograph Of Patient

Figure -5 Postoperative Mouth Opening Of Patient

DISCUSSION:-

The sialocele is a subcutaneous cavity containing saliva, usually resulting from trauma to the parotid gland parenchyma, laceration of the parotid duct or ductal stenosis with subsequent dilation. Extravasation of saliva into the surrounding tissues occurs following injury thus creating the sialocele.[7]

The parotid duct arises from the anterolateral portion of the gland and passes superficially over the masseter, where it is most susceptible to injury in penetrating facial trauma. The surface anatomy of the duct can be approximated by the middle third of a line drawn from the tragus to the midpoint of the upper lip. Any laceration crossing this line must be suspected of having a damaged parotid duct or its accompanying neurovascular bundle and should be meticulously assessed.[8]

Parotid duct injuries classification by van sickle's divides in to three regions Site A: posterior to the masseter or intraglandular, Site B: is overlaying the masseter, Site C: is anterior to the masseter.[3]

Diagnosis of sialocele is typically straightforward and may be made by history and clinical assessment of patient. Often history of trauma or surgical wound before the onset of the swelling are going to be present as was seen within the present case.

In present case "Vigrous" conservative treatment has been carried out, with a regime of regular aspiration, compression dressing and with Medicinal management the swelling is resolved.[7] A technique has been describe for treatment of parotid sialoceles when conservative management fails, in which a 0.5 cm incision is made through the overlying skin, and forceps inserted into the sialocele through the masseter muscle, and oral mucosa. A 5cm long Jacques catheter (EG 6) is then passed through the sialocele into the mouth and sutured to the buccal mucosa. This procedure creates an intraoral salivary fistula as one of the catheter remains within the sialocele while the other drains saliva into the mouth. The skin incision is sutured and compression dressing applied externally.[7]

CONCLUSION:-

Although Parotid gland and duct injury siaolocele shows less number of cases, care must be taken during incision placement in parotid region. By our approach to the case we can say that before performing surgical procedure we should adopt conservative approach first by pressure dressing, repeated aspiration and short term administration of steroid and muscle relaxant proved beneficial to the patient.

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