Stenson's Duct Sialocele: A potentially morbid clinical condition

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Abstract

Parotid Sialocele is an uncommonly encountered clinical entity in surgical practice and may result because of sialolithiasis or obvious/occult trauma of the parotid duct. Improper management of the condition can lead to considerable morbidity of the patient. We are reporting a case of improperly managed sialocele in an attempt to promote awareness of the condition amongst general surgeons

INTRODUCTION

Sialocele is a cystic swelling containing saliva, developing in parotid gland or duct as a result of stricture of parotid duct. The sialoceles can be diagnosed easily with the help of CT scan/MRI but their management can cause some serious problems, if not being handled by an experienced person, like in our case.

CASE REPORT

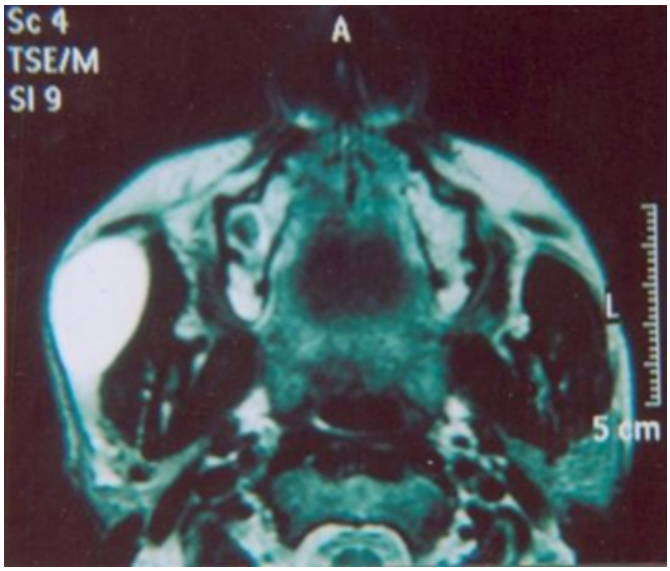
A 35 year old male presented with complaint of swelling right cheek for 1 year which used to increase slightly during meals and then decreased very slowly in next few hours. The swelling was cystic, about 4 cm diameter, non-tender with smooth margins, below zygomatic arch and over masseter muscle and on bimanual examination appeared more prominent towards skin rather than towards oral mucosa. On intra-oral examination scarred mucosa was appreciable near the site of opening of stenson's duct and the opening of duct neither could be seen nor could be cannulated.

The patient underwent surgery for this swelling six months back by a private practitioner through intraoral route and probably marsupialization of the cyst was done. He remained well for about one month after which the swelling recurred.

Ultrasonography revealed dilatation of Stenson's duct. Sialography failed as the duct could not be cannulated because of scarring. MRI confirmed dilatation of the Stenson's duct with normal parotid gland (Fig.I).

Figure 1

Fig I: MRI film showing dilatation of right Stenson's Duct with normal parotid gland



The swelling was explored by a classical parotidectomy incision. Parotid gland was normal and the swelling was involving almost the entire length of Stenson's duct (Fig.2).

Figure 2

Fig 2: Operative photograph showing the entire length of Stenson's duct with cyst

Superficial parotidectomy with excision of duct having cyst was carried out. Patient remained well in postoperative period and in follow-up. Histopathology confirmed the diagnosis of Stenson's duct sialocele.

DISCUSSION

Sialocele is an uncommonly encountered clinical entity in the practice of an average general surgeon. Passage of stones through the duct causing abrasion of epithelium and subsequent stricture is one possible mechanism of this pathology.[1] The anatomy of Stenson's duct makes management of parotid stones more difficult, since manipulation of parotid duct is complicated by very high incidence of stricture formation and so sialocele development.[2] Another possibility put forth is stricture developing after occult or obvious parotid duct injury. Abnormal tooth or ill-fitting dentures seems to be the cause of occult trauma. Sialography, if possible may be useful but in modern scenario, CT scan and MRI are the better alternatives.[3]

A variety of treatments have been suggested for sialoceles which have become chronic. Some patients can be managed with repeated aspirations and compression.[4] Some authors advocate insertion of a temporary catheter into the duct via intra-oral route which allows saliva to enter into the oral cavity. But as expected this technique also has been met with limited success as this creates scarring around the cannula.[5] Although use of low dose radiations in an attempt to fibrose the gland has been tried at some centres, it is difficult to justify such an extreme treatment with potential long term risks for a benign condition.

Superficial Parotidectomy with excision of duct along with sialocele has been the most preferred treatment in resistant cases where all conservative treatments fail.[6] This will eliminate the source of saliva and will cure the condition in almost all cases, as in our case. So it is concluded that all parotid sialoceles should be investigated by CT/MRI of the affected area and managed with superficial parotidectomy.

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