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Juvenile Recurrent Parotitis

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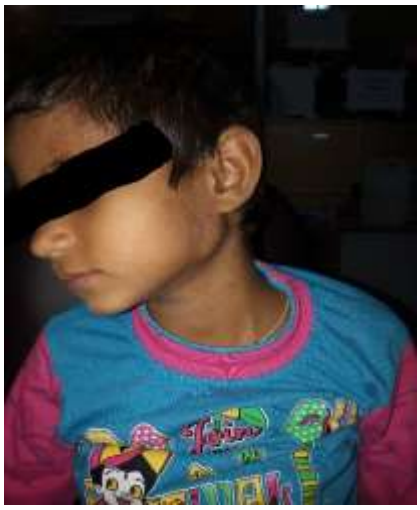
ABSTRACT

It is a rare condition and characterized by multiple episodes of parotid swelling and/or pain associated with fever or malaise over a period of years. Juvenile Recurrent Parotitis (JRP) is defined as recurrent inflammatory parotitis in children of unknown etiology. Salivary gland diseases in children are rare, apart from viral-induced diseases. Clinical diagnostics and especially the surgical treatment are influenced by stringent indications and a less invasive strategy. Due to the rarity of tumors of the salivary glands in children, it is recommended to treat them in a specialized center with greater surgical experience. In most cases, the symptoms resolve spontaneously after puberty but all children should be screened to exclude Sjogren's syndrome, lymphoma and immunodeficiency including human immunodeficiency virus. Parotid abscess results as a complication of primary parotitis and are very rare in paediatrics population, we present a 6-year-old girl who had 15 episodes of recurrent parotid swelling over past 3 months.

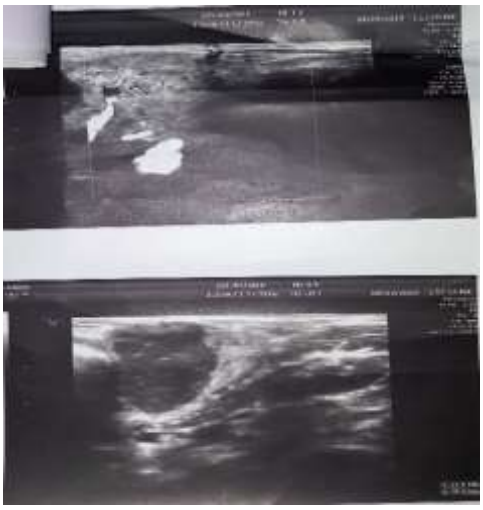
Keywords— *Parotitis, Parotid abscess, Juvenile Recurrent Parotitis*

1. CASE REPORT

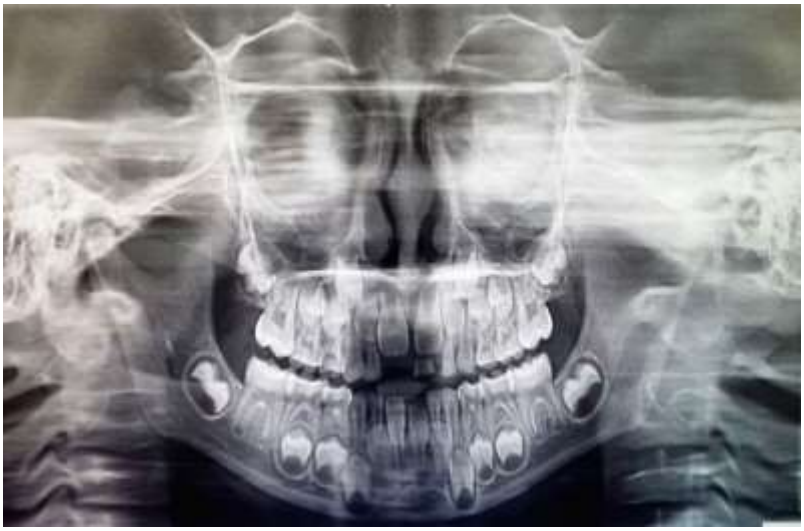
A six-year female came to OPD with chief complain of swelling over the left side of the face at an angle of mandible since 1 year which is progressive in nature without pain since 3 months associated with low-grade fever on and off. There was no history of difficulty in swallowing, chewing or a sore throat. The last episode lasts for 5 days during which she didn't have dryness of mouth or increased salivation or altered taste. There was no history of dryness of the eye, joint pain or skin rashes suggestive of autoimmune disorder. There is no significant family history or history of the same diseases in the family. On general physical examination, she was afebrile with stable vitals. There is single elliptical swelling present on the left side at the angle of the mandible with no colour change of skin over swelling, the swelling appears smooth, and it is mobile on the opening mouth. (Figure 1(a)). On palpation the temperature of the skin in normal, the swelling was soft single in number non-tender. There was no fluctuation or associated facial nerve palsy. There is no other cervical lymphadenopathy.



(a)



(b)



(c)

Fig. 1: Photographs of the patient and their reports

Oral cavity examination shows satisfactory oral hygiene. Pressure over the swelling did not cause any discharge in the oral cavity. The systemic examination was normal. Her blood count TLC (12000) at borderline and ESR (22) is also at borderline, all another parameter within normal limit. Her USG revels large hypoechoic lesion measuring 22*15 mm in the left parotid region with few serrations with few internal echoes, with no vascularity. Left parotid was enlarged with heterogenic echotexture with multiple lymph nodes suggesting sialectasis. So FNAC advised which also favouring the diagnosis. So diagnosis was made on basis of a report which is Juvenile Recurrent Parotitis. The patient was advised intravenous antibiotics and maintain hydration and discharged on an oral antibiotic for further five days. Swelling subsides significantly and she has remained asymptomatic in follow up of 1 year. Parents were assured that she might be all right when grown up.

2. DISCUSSION

Juvenile Recurrent Parotitis is the second most common cause of parotitis in children after mumps.[1, 2] It commonly occurs between age 3 to 6 years and often not diagnosed, gone unnoticed or misdiagnosed as mumps. The disease is female predominant.[3] Juvenile recurrent parotitis characterized recurrent episode of swelling and pain in parotid gland associated with a fever which lasts 2-7 days usually. It occurs usually unilateral but can also occur bilaterally with symptom more on one side than other. The natural history of the disease is that it reoccur with an average number of attack per year range from 1 to 20.[1] In 90 percent of cases the symptom resolves spontaneously by puberty. In a few severe cases, there is progression leading to the destruction of the parenchyma of gland leading to diminution of functionality 50 -80 percent.[4] Although most cases are idiopathic, juvenile recurrent parotitis might be first presenting symptom in immunodeficiency, HIV or Sjogren's syndrome.

The etiology of disease ranges from immunodeficiency, Allery, URTI etc. but none of them is conclusive.[5]SHAKALIM et al suggested lack of IgA may be involved in JRP.[6] However, the main cause postulated for the pathogenesis of JRP is decreased salivary production with insufficient outflow through ducts which favors ascending infection through oral cavity .[3]

Histologically there is intraductal cystic dilatation of peripheral duct with periductal infiltration of lymphocyte called as sialectasis. This aspect is believed to be characteristics of JRP. Sialectasis was previously diagnosed by sialography but ultrasound has superseded that technique. MR Sialography is a newer technique which doesn't require contrast medium, it primarily images liquid structure and the flow more so after stimulation with ascorbic acid. So it has an advantage as it can be used in the acute attack of sialadenitis.[5]

Treatment option ranges from conservative to an invasive procedure. Initially, a conservative approach is opted as per natural history of the disease, it resolves spontaneously in 90 percent of cases. Analgesia, good oral hygiene, massage to the gland, use of chewing gum and sialogogic agents are useful. Antibiotics during the attack are often proposed to prevent parenchymal damage while low dose antibiotics are preferred in immunoglobulin deficiency.[7]Moreover few patients develop sequelae such as recurrent pain, chronic swelling and reduced function of the gland are candidates for more aggressive therapy and invasive procedure. It includes duct ligation, parotidectomy or tympanic nerectomy.[8]There are few reports showing JRP in a young individual with Sjogren's syndrome develop in adult age. So regular follow up with early treatment in the pediatric group is required.

3. CONCLUSION

In general most patient need reassurance, analgesia and little intervention. The risk of over investigation and treatment should be borne in mind. It is recommended more conservative management in children as most symptom resolve spontaneously in the adult. Ultrasonography is more sensitive than sialogram. Other investigation as blood counts and autoimmune marker as anti –RO and anti -LA should be done to rule out other differential diagnoses like Sjogren's syndrome and immunodeficiency.

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