Parotitis lithiasis in children rare cause of recurrent parotid swelling in children

N.BELHAJ(1,3), I.BOUMENDIL(1), H.RAHIM(1),
I.ALLOUCH(4), R.BENCHEIKH(2), M.A.BENBOUZID(2), LESSAKALLI(2)

1Resident physician in otorhinolaryngology, Department of Otorhinolaryngology, Head and Neck Surgery, Ibn Sina University Hospital, Rabat, Morocco

2Professor of otorhinolaryngology, Department of Otorhinolaryngology, Head and Neck Surgery, Ibn Sina University Hospital, Rabat, Morocco

3Faculty of Medicine and Pharmacy of Rabat, Mohammed V University, Rabat, Morocco

Corresponding author : BELHAJ NAJOUA : belhajnajwa1990@gmail.com

Abstract:

In pediatrics, the parotid lodge is known for its infectious pathology dominated by mumps parotitis and recurrent microbial parotitis. Conversely, tumor pathology plays a more modest role, but lithiasic origin not to be eliminated. We report in this work observation of a child who presented episodes of recurrent parotid swellings whose etiological balance returned in favor of the lithiasic origin.

Introduction:

Parotitis in children is common, with simple clinical diagnosis and treatment. The problem concerns recurrent forms. Infectious parotitis can occur at any age. However, it is in children that their frequency of occurrence is the most high, with first outbreaks between the ages of 3 and 6 years which can hide and allow alongside other much less frequent diagnoses such as lithiasis parotitis. We report in this work case of a child who presented recurrent bilateral parotitis treated as of Moorish origin.

Case report:

This is a 06-year-old patient with no notable pathological history who has recurrent episodes of parotid swelling for a year treated with each episode as mumps parotitis due to the increase in the frequency of recurrences the patient consults for ENT examination. (FIGURE 1)
Figure 1: Image of the child with parotid swelling

The biological assessment was normal, on the ultrasound assessment, we found a calculation of about 0.5 millimeters located very deep in the stenon, removed endoscopically with infiltration through the papilla of an antibiotic corticosteroid mixture, the decline over 3 years with clinical monitoring was good. (FIGURE 2)
Figure 2: Parotid ultrasound showing lithiasis

**Discussion:**

Recurrent parotitis in children is a problem because, during the first episode, the diagnosis of mumps is made. These parotitis begin in children four to five years old and typically disappear in adolescence; they are of unknown etiology, often recurrent with several infectious episodes each year. It is a uni- or bilateral swelling, most often asynchronous. The swelling is inflammatory and we see pus coming out of the parotid duct from the ostium. Painful, they are accompanied by satellite cervical lymphadenopathy.

Salivary lithiasis is also called sialodochitis, salivary lithiasis is a frequent condition; submandibular lithiasis is by far the most common and occurs at all ages. These are most often stones (calcium salts) which migrate with the salivary flow; these calculations can be multiple. The exact etiology remains uncertain; some favorable factors can be noted: salivary stasis, spasm or narrowing of the canal, inflammatory lesions, and dental infectious foci.
Even if the diagnostic performance of ultrasound is imperfect, its non-invasive nature and its accessibility make it a first-line examination, most often sufficient. (2.3.4)

The helical CT scan without injection with multi-planar reconstructions seems the most suitable for confirming the presence of lithiasis, especially if it is small, slightly calcified, making it radiolucent on conventional radiographs and to have the exact number of lithiasis. The MRI sialo is a second-line examination gradually replacing conventional sialography for canal exploration, which nevertheless has the advantage of better spatial resolution.(2.5.6)

The sialendoscopy is carried out outside any infectious episode; the examination is most often conducted under local anesthesia, according to the same mode for a sub-mandibular or parotid gland, the patient being installed in a semi-seated position. In children, anesthesia is most often general.

After locating and introducing a probe of 0000 (identical to the dilation probes of the lacrimal canals) then of 000 (then of 00 ...), the papilla is gradually dilated to arrive at a diameter equivalent to that of the endoscope.

For the Wharton canal, the papilla must be stretched by infiltrating it beforehand. For the Sténon canal, you have to stretch your cheek forward to pass the masseter curvature. Exploration is then continued from the main canal to the accessory canals by expanding the canal either using an automatic foot-operated irrigation system, or more simply using a syringe and an infusion set. There is no defined systematization of the arborization of the parotid gland.

Calculations with a diameter of less than 4 mm are removed either using a Dormia basket probe (quill 1.7) or using a jaw pliers. Salivary gland endoscopy allows stones to be removed atraumatically and non-invasively. (7.8)

In the case of parotid lithiasis, sialendoscopy certainly represents the technique to be proposed as first line in the treatment of parotid obstructive pathology. While the surgical risk for the facial nerve of a parotidectomy seems acceptable in case of suspected tumor pathology, it is more difficult to consider it for iterative attacks of lithiasic parotitis or parotid colic.(8)

Conclusion:

Mumps are characterized by a painful and bilateral swelling of the parotid and the submandibular glands. They usually occur in children, but sometimes the recurrence of this bilateral parotid swelling must suggest another diagnosis: systemic diseases, juvenile idiopathic parotitis, but lithiasic origin not to be eliminated ...
References:

1/ Tumeurs des glandes salivaires J.P. Fontanel, F. Poitout, JM Klossek Editions techniques EMC Otorhinolaryngologie 20-628-B10 1995


