

Sialodochitis Revealing A Large Stone (Giant Sialolith) Of Wharton's Duct

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Abstract

Case Report

The stones generally involved in sialolithiasis pathology are of variable size, generally ranging from one millimeter to less than one centimeter. Large stones, that is, those larger than 1.5 cm in any axis are rare. We report a 2.5 cm x 1.2 cm stone of the submandibular gland duct revealed by intraductal infection in a 33-year-old woman treated with oral trans mucosal surgery under local anesthesia.

Keywords: Sialodochitis; Sialolithiasis; submandibular gland; Wharton's Duct.

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INTRODUCTION

The lithiasis pathology of the submandibular gland is rich, varied and frequent. It is characterized by mechanical and infectious complications including sialodochitis which is an intraductal infection. The stones generally involved in this sialolithiasis pathology are of variable size, generally ranging from one millimeter to less than one centimeter. Large stones, that is, those larger than 1.5 cm in any axis are rare [1-2]. The treatment of sialolithiasis depends on the seat and the size of the stone [3, 4]. We report the management of a large stone of the submandibular gland duct revealed by intraductal infection.

CASE REPORT

It was a 33-year-old woman who consulted for a painful swelling of the right anterior floor of the mouth

that had been evolving for 3 days with significant discomfort in feeding. Interrogation revealed intermittent discomfort in the right mandibular area without true swelling or colic. The clinical examination noted a good general condition, an afebrile, a congestive mucosa covering a hard mass, well limited, occupying the right anterior hemi floor (Figure 1a). Above the swelling, the mucosa had a punctiform fistula through which purulent saliva flowed. The bidigital palpation of the submandibular glands was unremarkable. The diagnosis of right submandibular lithiasic sialodochitis has been made. Under local anesthesia, an incision of 2 cm was made with regard to the stone along the axis of the duct allowing the extraction of the stone and the flow of a purulent saliva (Figure 1b). The stone was 2.5 cm x 1.2 cm (Figure 1c). The incision was left open without suturing.

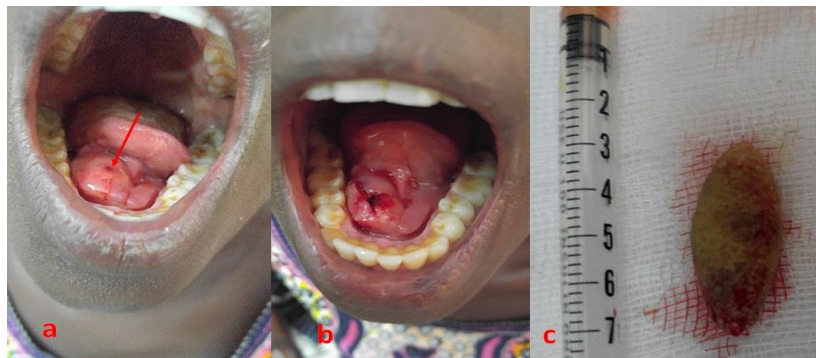


Fig-1: Tumefaction of the right anterior floor (a) with fistula (red arrow); incision along the axis of the Wharton duct (b); stone measuring 2.5 cm x 1.2 cm (c).

The patient was put under the combination of Spiramycin - Metronidazole 1.5MUI / 250mg at the dose of 1 tablet morning and evening for 10 days, a mouth wash, diclofenac and paracetamol. The sequences were

simple with the presence of a neo ostium on the duct path (Figure 2). The ultrasound control of the salivary glands was normal.



Fig-2: Local status 6 months after treatment showing a neo-ostium (red arrow) and the Wharton's duct orifice (yellow arrow)

DISCUSSION

The size of the sialolithiasis does not generally exceed 1 cm; the increase in their volume depends mainly on the capacity of the excretory duct to expand. This dilatation capacity allows in certain cases a normal salivary flow around the stone which increases in volume therefore without true symptom as in the present observation [1, 3, 5]. The stone, generally consisting of calcium phosphate or calcium carbonate in combination with other organic salts and molecules such as glycoproteins, cell desquamation residues and mucopolysaccharides, increases by 1 to 1.5 mm in size [6, 7, 8]. The uniqueness of the stone, the large size (≥ 5 mm of long axis) and the location at the middle third (behind the crossing with the lingual and non-intraglandular nerve) favor superinfections such as sialodochitis, pelvic cellulitis and submandibulitis [8].

Submandibular sialodochitis is clinically diagnosed by the sudden onset of pelvic pain irradiating into the ear, associated with dysphagia, sialorrhoea, lingual impotence, and sometimes moderate hyperthermia. The examination found a homolateral inflammatory swelling of the salivary crest with discharge of pus at the ostium. The evolution in the absence of treatment is towards the pericanalar abscess, the cellulitis of the floor, with appearance of a trismus and more general signs [9]. Although the bidigital palpation is able to locate the stone, imaging examinations can help the diagnosis of sialolithiasis: anterior and posterior occlusal radiograph with a strict profile or orthopantomogram, ultrasound, CT, sialendoscopy, sialography by magnetic resonance. Ultrasound has great precision in the localization of sialolithiasis; Sia-

lendoscopy allows examination of the ductal system for diagnostic and therapeutic purposes and sometimes has a higher accuracy than magnetic resonance sialography, especially for small distal stones [2, 4-6, 8]. Postoperative ultrasound in our observation was designed to look for intraglandular stones and signs of chronic sialadenitis.

The therapeutic options for submandibular lithiasis depend on the size and location of the stone. The small stones can be extracted by the ductal ostium using bidigital palpation or sialendoscopy; large stones are treated with lithotripsy or transmucosal oral surgery or sialendoscopy. Submandibulectomy is indicated in case of failure of the less invasive methods available or in case of functional destruction of the gland [2, 3, 6, 10]. The incision left open after extraction of the stone in our observation aims to allow the salivary flow with a neo-ostium and to avoid a risk of post-operative stenosis of the duct.

CONCLUSION

Large intraductal submandibular stones are rare and can be revealed by acute infectious accidents. Surgical extraction of a large anterior intraductal stone is generally possible under local anesthesia and without the need for even partial closure of the incision.

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