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SIALOLITHIASIS – WITH INPUTS FROM ONE CASE

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ABSTRACT

The formation of calculus in the salivary glands is a rare disease, often occurring with nonspecific complaints. In this work the authors present a clinical case of a 72 year old woman with sialolithiasis. Described are methods of diagnostics, applied operational and conservative treatment results and the outcome thereof. Finally draw conclusions about the need for surgical removal of the gland as the most correct method to treat and prevent the occurrence of severe complications.

Key words: sialolithiasis, submandibular gland, diagnostics, surgical treatment

The sialolithiasis is formation of a concretion in the parenchyma or ductal system of salivary glands. (1)

For the first time in 1896 Kuttner published 2 cases observed by him, for which he initially consider, that formation located in the salivary glands is due to malignant process. Subsequently after microscopic observation, he finds that it is a chronic inflammation of the gland. Along with signs of chronic inflammation, and found tiny crystals in the parenchyma and canalicular system, which he diagnosed sialolithiasis. (2)

The ductus of submandibular gland - ductus submandibularis is relatively large in all its along, but the excretory meatus is too narrow, which together with the fact , that the gland is with predominantly mucous production creates opportunities for retention of salivary secretion.

The excretory duct of parotid gland reverse, is relatively narrow in its along, but his excretory meatus is large, so that the calculus in the parotid gland are rarity. (3)

In literature are concerned approximately 1.2% of the human population, as more frequently suffer male population (4), 75-85% of cases of sialolithiasis the calculus submandibular gland is located in the ductal system, and in 15-20% within the gland parenchyma. (5) In 70-80% are found only 1 formed calculus (6), alculuses in 20% and more than 2 very rare - in 5% of patients. (7)

Depending on the correlation between mineral and organic substances, rocks are divided into X-ray positive and X-ray negative. (5)

In own research Lustmanm, Regev, and Melamed 1990 are observed 245 cases of patients with sialolithiasis, which describing the following clinical manifestations:
- in 62.5 percent - pain;
- in 15.5 percent – purulent secretion of the gland;
- in 2.4 percent - asymptomatic flow. (7)

At the beginning pain and edema occurred more frequently during or after meals, often pain can radiates to the ear, (8) which could cause some diagnostic difficulties. In severe cases, in consequence of necrotic changes is possible formation of fistulas. Crossed next to n. facialis, is also in danger of damage as a result of inflammation. (9)

The purpose of this work is to present our observed clinical case of a patient with sialolithiasis. It concerns a woman of 72 years, which when entering the clinic for ear, nose and throat diseases at University Hospital in Stara Zagora has the following complaints: recently pain and swelling in the right submandibular area, increase in consumption of food. Was conducted ambulant treatment with slight effect.

The examination found a good general condition, by palpation in the right submandibular gland is demonstrated tumor with bone density, painless, movable, unknitting, with surrounding tissue and subdermal tissue. On the part of other ENT-organs did't find any pathological departures.

By ultrasound examination of the right submandibular gland appears rough, hypoechoic structure (information for atrophic changes), in dimensions - 37/17 mm, dilated salivary ducts in the presence of numerous concrements, the largest of which in size 8-9 mm and the rest 3 to 6 mm. Missing data for increased regional lymph nodes **(Fig. 1, 2)**.

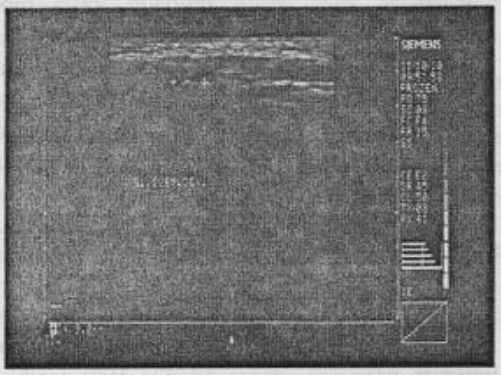

Fig. 1

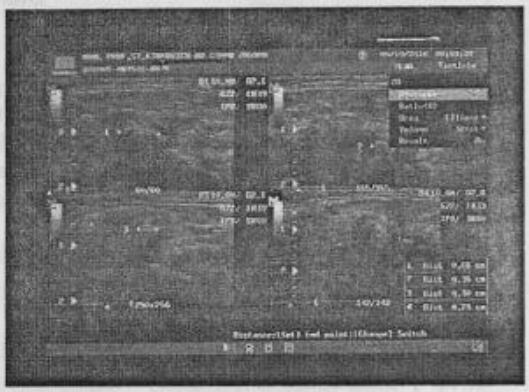

Fig. 2

From paraclinical examinations there didn't find distinct changes.

Under general intubation anesthesia was performed extirpation of the gland, after ligation of the gland duct **(Fig. 3)**. After thorough hemostasis drain was put in and was made a sterile bandage **(Fig. 4)**.

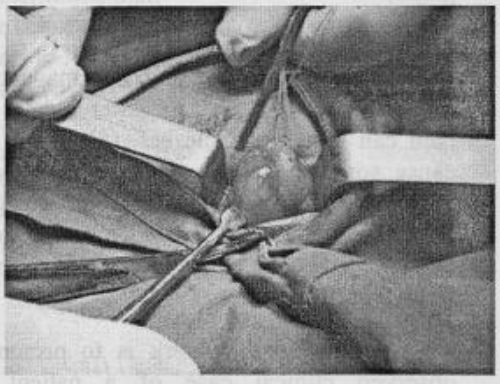

Fig. 3

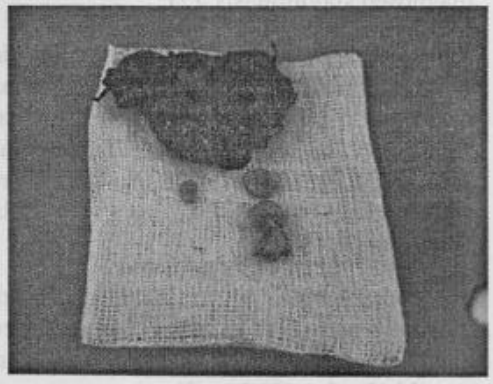

Fig. 4

As a concomitant treatment we applied:

- Duomox 1000 – 2x1
- Analgin 500 - 2x1
- Milgama N 150 – 3x1

Postoperative period went without complications. Drains are removed at 3 day. Control examinations made on 14 and 30 days after surgery didn't find residual effects.

CONCLUSIONS

1. The sialolithiasis is a disease, occurring relatively rare in human populations.
2. Cases with more than 2 calculuses in gland are very rare - 5% of patients.
3. Although there exists many alternative methods of treatment (dietary treatment, endoscopy, ultrasound lithotripsy) most commonly used and with best late results is radical extirpation of the gland.
4. Surgical intervention requires increased attention by the operator, to avoid injury to mandibular branch of n. facialis and n. lingualis.
5. The clinical picture is nonspecific, requiring a broad differential diagnosis.
6. Opportunely diagnosis and adequate treatment prevented occurrence of severe complications, ensure favorable therapeutic effect and full recovery.

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