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SURGICAL ASPECTS IN THE GLANDULAR ODONTOGENIC CYSTS TREATMENT *ХІРУРГІЧНІ АСПЕКТИ ЛІКУВАННЯ ЗАЛОЗИСТО-ОДОНТОГЕННИХ КІСТ ЩЕЛЕП*

Summary. The article deals with a clinical case of a glandular odontogenic cyst in maxilla. The research deals with the effectiveness of deep cystectomy which presupposes additional treatment of the bone cavity sides by a dental cutter. The aim of this intrusion was prevention of the possible GOC recurrence.

Key words: glandular odontogenic cyst, cystectomy, residual glandular epithelium.

Резюме. В статті описано клінічний випадок залозисто-одонтогенної кісти бічного відділу верхньої щелепи. Розглянута ефективність розширеної (поглибленої) цистектомії», суть якої полягає у додатковому обробленню всіх стінок сформованої кісткової порожнини фрезою кулястої форми. Метою цього втручання було попередження можливого рецидиву ЗОК.

Ключові слова: залозисто-одонтогенна кіста, цистектомія, залишковий залозистий епітелій.

Introduction. Glandular odontogenic cyst (GOC) is a rare odontogenic disease which originally comes from glandular epithelium. It's specific weight is 0,012 %– 1,3% [2,6]. First cysts researches (19 clinical cases) were first made in 1995 [1], 54 more in 2002 [5], 113 more till 2009 [3]. GOCs mainly prevail in elder people in the front area of the upper jaw or the molar teeth area in the upper jaw. On radiographs it can appear as a unilocular or multilocular entity [3]. This cyst type treated by a classical method -“cystectomy” showed a high recurrence level (25-55%) [4]. That is why we suggest a deeper and more aggressive method of the GOC surgical treatment.

The aim of the research.

Description of the pathology clinical case and investigation of the effectiveness of the suggested surgical treatment.

Materials and methods.

The case of glandular odontogenic cyst in maxilla was observed in a 28-year-old patient on the basis of M.I. Pyrogov Regional Clinical Hospital in 2015. The preliminary diagnosis was “odontogenic cyst” and the “deep cystectomy” under the local anesthetic was conducted.

Results and discussion.

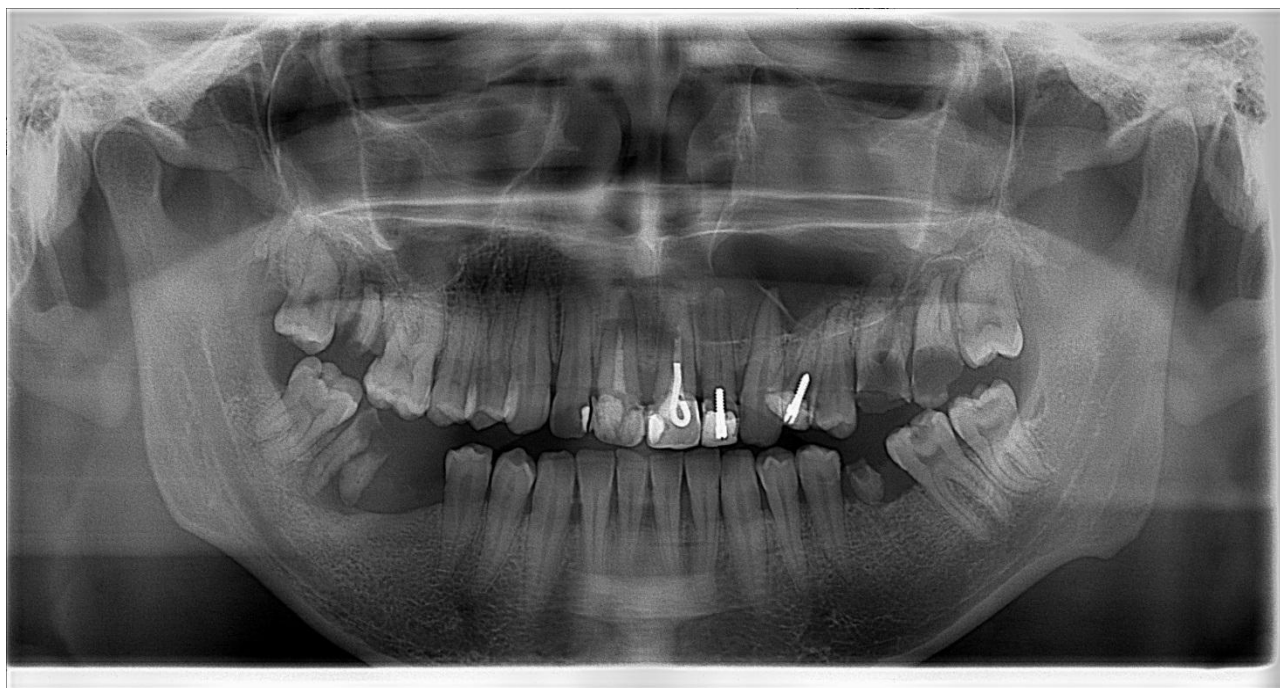
The patient S, 28 asked for help in the M.I. Pyrogov Regional Clinical Hospital. He complained of oedema and asymmetric face caused by upper jaw deformation during many years. He consulted stomatologists who prescribed antibiotic therapy. The state worsened.

The general state of the patient is satisfactory. While examining the patient face asymmetry was indicated. In the mouth cavity in the area of 22,23,24 teeth there was an oval form protrusion indicated. The palpation of this entity is painless. The mucous membrane above the protrusion is hyperemated. Crowns o 22nd and 24th teeth are damaged by caries. Intubation and percussion of these teeth are painless.

The orthopantomogram shows the oval shaped attenuated bone tissue 5,3 cm long and the top of the 22, 23, 24 teeth are deepened in the cyst cavity. Crowns of 22nd and 24th teeth are ruined (Pic. 1).

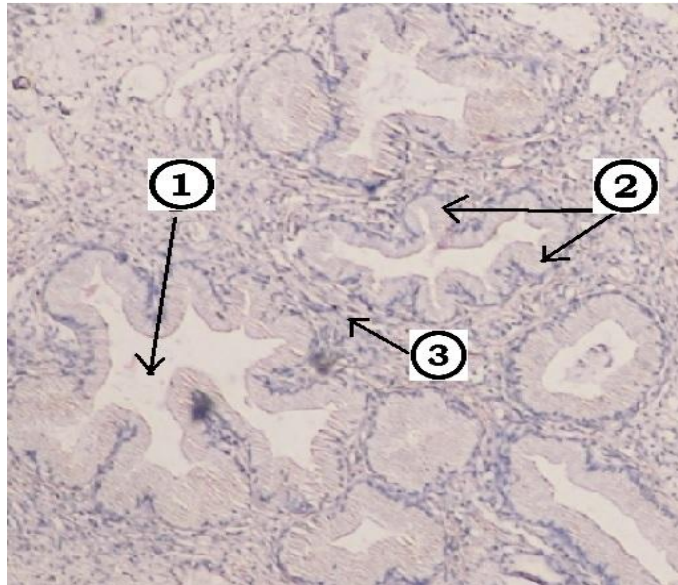
Preliminary diagnosis: “Radicular cyst in maxilla on the left”. Under the local anesthetic the 22nd and 24th teeth were distracted and cystectomy was operated.

Pic.1 The orthopantomogram of the patient S. The attenuated bone tissue in the area of 22,23,24 teeth

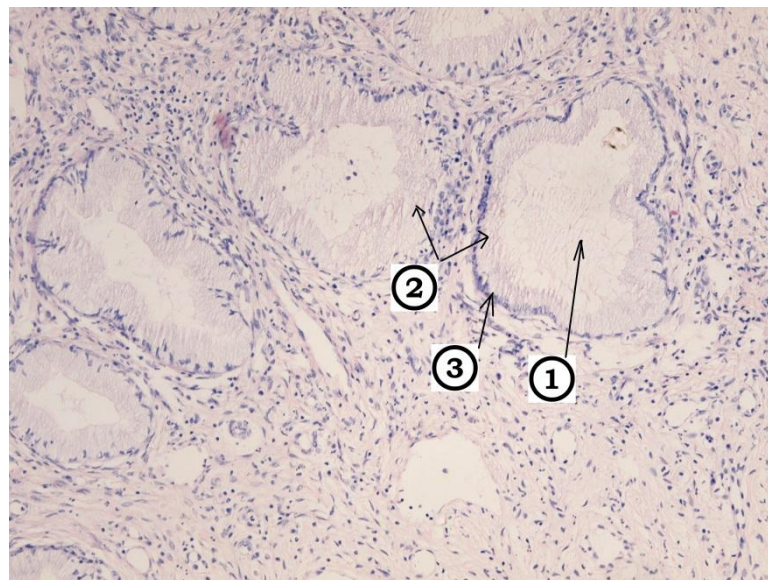


While operating the pathologic entity it was revealed to have a distinct bone membrane introduced a fibrous tissue not connected with the mucous membrane of the maxillary sinus. While revising the surgical wound no pathological changes were indicated. The wound was treated and sutured. The distracted tissue was sent for a histological investigation. The wound treated by a primary surface tension.

The histological investigation showed that the connective tissue with the glandular structures which resemble small salivary glands with the multilayer epithelium with the mild lymphocyte infiltration. Hemorrhages are evident (Pic. 2,3).



Pic. 2. Fragment of the glandular odontogenic cyst. Object glass x 40, ocular x10. Color: hematoxylin and eosin. 1) little salivary glands; 2) multilayer epithelium; 3) fibrous tissue



Pic. 3 Fragment of the glandular odontogenic cyst. Object glass x 20, ocular x10. Color: hematoxylin and eosin. 1) little salivary glands; 2) multilayer epithelium; 3) lymphocyte infiltration.

Final diagnosis: “The glandular odontogenic cyst in maxilla on the left”. After the final diagnosis a secondary surgical intrusion was suggested - a “deep cystectomy”. The aim of this intrusion was prevention of the possible GOC recurrence. Deep cystectomy presupposes additional

treatment of the bone cavity sides by a dental cutter. While this manipulation some additional layer of the bone tissue and remnants of the glandular epithelium are distracted.

After the secondary surgical treatment the patient is under the medical control. Clinical examination after 3 and 6 months didn't show any recurrences. The next examination will be held in 12 months.

The received results show evident effectiveness of the "deep cystectomy", though they require more investigation.

Conclusions.

- 1) Glandular odontogenic cysts are an aggressive entity with a high level of recurrence – 25-55%.
- 2) Additional distention of the bone cavity after GOC surgery prevents its recurrence after 6 months.

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