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**UDC** 616

### **INFORMATIVE VALUE OF CYTOLOGICAL STUDY IN THE DIAGNOSIS OF NODULAR MASTOPATHY**

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**Abstract** The aim of the study was to investigate the number of informative and uninformative puncture due to the results of cytology when performing biopsy in terms of diagnosing the nodal mastopathy and making a decision on further treatment tactics. According to the study results uninformative cytograms were reported in 37 women (41.1%). It confirmed the validity of the active tactics of following this group of patients with the use of fine-needle aspiration biopsy of several node sites including those under the control of the ultrasonic sensor, trepanobiopsy and sectoral breast resection followed by pathological examination of surgical material.

**Key words:** localized fibroadenomatosis, fibroadenoma, nodular mastopathy, fibrocystic mastopathy, fine-needle aspiration biopsy, cytology.

Fine-needle aspiration biopsy followed by cytological examination of the aspirate is one of the methods to confirm nodal form of mastopathy, to establish the degree of proliferative activity of cells in the node, and their possible atypical transformation. The results of this diagnostic method largely influence on a doctor in choosing a medical tactics. According to the literature, if there are no signs of proliferation in cytological study of paracentetic material, it is possible to choose an observation tactics and to start treatment with conservative therapy refusing the sectoral resection of mammary gland [3]. However, the rate of errors of cytological diagnosis in patients with benign formations in mammary glands is known to be up to 7% and uninformative punctures – 18.6%. Mistaken punctures, little number or lack of material are referred to the significant disadvantages [2].

**Objective:** to determine the number of informative and uninformative punctures at a single-shot fine-needle aspiration biopsy while diagnosing the node mastopathy.

**Materials and methods.** According to the objective study the examination of 90 residents of the Amur region with localized fibroadenomatosis (mean age 30.6 years) was performed. A fine-needle aspiration biopsy for the standard technique (needle length of 6 cm, a diameter of 1 mm) was made to them. A puncture area was determined on the basis of clinical, echographic and radiological data. The obtained smears were stained by the Pappenheim-Kryukov's method [1].

**Results and discussion.** As a result of cytology of obtained material the marked proliferation of glandular epithelium was detected in 12 (13.3%) women, moderate proliferation - in 3 (3.33%) patients, the proliferation

of the glandular epithelium (without specifying the degree of its severity) – in 19 (21.1%) persons, marked proliferation of the glandular epithelium with atypia of individual cells – in 2 (2.2%) cases, the cells of glandular epithelium of normal structure – in 11 (12.2%) women, degeneratively changed cells of glandular epithelium – in 4 (4.4%) patients, flattened cells of the cysts lining – in 1 (1.1%), changed red blood cells and macrophages with hemosiderine – in 1 (1.1%), blood elements, fat droplets – in 24 (26.7%) cases, bare nuclei of disrupt cells – in 4 (4.4%), not identified cellular elements – in 9 (10%) women. Smear cytogram was informative in 42 (58.9%) cases, uninformative - in 37 (41.1%). Then the sectoral resection of mammary gland was performed to the patients. According to the results of morphological study of surgical material, in most cases fibroadenoma was found – in 67 (74.4%) patients, proliferative mastopathy - in 8 (8.8%), fibrous mastopathy with an inflammation - in 1 (1.1%), fibrous mastopathy with elements of intraductal papilloma – in 1 (1.1%), chronic inflammation with the cells of foreign bodies - in 1 (1.1%), adenoma – in 2 (2.2%), a cyst with the growth of granulation tissue – in 1 (1.1%), chronic inflammation with the cells of foreign bodies – in 2 (2.2%), fibrous mastopathy - 3 (3.3%), breast fragment with multiple sclerosis - 1 (1.1%), fibrocystic mastopathy - 4 (4.4%).

Thus, the presence of pathology being obligate precancer was morphometrically proved in 83 patients (92.2%). And, uninformative cytogrames were observed in 37 women (41.1%) that are much higher than indicated in the literature 18.6% [2].

Conclusion. These data suggest that cytological study is not a decisive factor in the choice of treatment tactics of patients with nodal mastopathy. The given method is only a part of the overall survey algorithm. In this category of patients an active following tactics should be applied: fine-needle aspiration biopsy from several areas of a node, including the control of the ultrasonic sensor; trepanobiopsy, allowing to get a larger amount of cells for cystoscopy; sectoral resection of mammary gland followed by pathological examination of surgical material.

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#### THE RESULTS OF TREATMENT OF PRIMARY OPEN- ANGLE GLAUCOMA WITH THE USE OF ELECTRICAL STIMULATION

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**Abstract** A comprehensive treatment of decompensated unstabilized open-angle glaucoma at the early stages, including medication and physiotherapy. The study was conducted in 23 patients (34 eyes). Under the conjunctiva in the lower-outer quadrant the peptide neuroprotector Cortexin of 10 mg (0.5 ml) was injected, followed by electrostimulation. To evaluate the results of treatment visometry, perimeter, and electrosensitivity and electrolability of optic nerve, tonometry were used. The results of treatment showed increased peripheral visual field by an average of 60° (a total of 8 degrees meridians). Comprehensive treatment of compensated unstabilized glaucoma improves visual function and stabilizes glaucomatous process.

**Key words:** Open-angle glaucoma, electrostimulation, Cortexin.

The main reasons for the progression of neuropathy in glaucoma with normal intraocular pressure (IOP) is a chronic ischemia and hypoxia associated with a deficit of hemodynamic and rheological blood disorders regional and systemic nature [2, 4, 5]. These processes lead to the loss of cell nutrients, accumulation of free radicals, activation of certain enzymes and accumulation of metabolic products [1, 3, 6].

**Material and methods.** We observed 23 patients (34 eyes) with compensated unstabilized primary open angle glaucoma early stages (including 12 men and 11 women, aged 52-74 years). Antihypertensive therapy received 19 patients, 4 patients had pseudonormal pressure.

All patients under the conjunctiva in the lower-outer segment was added a solution of 10 mg Cortexin 0.5 ml (10 injections), followed by electrical stimulation. For electrostimulation electrostimulator used ophthalmic ESOM microprocessor with the following parameters: pulse duration of 10 ms, the amplitude and frequency of the pulse selected individually, the number of pulses in a pack of 5, the interval between the packs 2 seconds, the number of packs in the series 30, the interval between the series 30 seconds, the number of series (applying the active electrode to each eye) 4. Pacemaker was placed on the eyelid alternately in the temporal and