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MORPHOLOGICAL FEATURES OF FIBRO-CYSTOUS MASTOPATHY

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Summary
The data were analyzed on the basis of surgical and biopsy materials for 2021 received by the Bukhara Regional Bureau of Pathological Anatomy. Studies were carried out on biopsy materials of the breast of 28 women with fibrocystic mastopathy. Pathological studies confirmed the diagnosis of fibrocystic mastopathy.

Key words: fibrocystic mastopathy, morphology, mammary gland.

МОРФОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ФИБРОЗНО-КИСТОЗНОЙ МАСТОПАТИИ

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Резюме
Данные проанализированы на основании операционно-биопсийных материалов за 2021 год, поступивших в Бухарское областное бюро патологической анатомии. Исследования проведены у биопсийных материалов молочной железы 28 женщин с фиброзно-кистозной мастопатией. Патоморфологические исследования подтвердили диагноз фиброзно-кистозной мастопатии.

Ключевые слова: фиброзно-кистозная мастопатия, морфология, молочная железа.

FIBROZ-KISTOZ MASTOPATİYANING MORFOLOGIK XUSUSIYATLARI

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Buxoro davlat tibbiyot instituti

Annotatsiya
Ma’lumotlar Buxoro viloyat patologik anatomiya byurosiga yuborilgan 2021 yil uchun jarrohlik va biopsiya materiallari asosida tahlil qilindi. Fibroz-kistoz mastopatiya bilan og'rigan 28 ayolning ko'krak bezi to’qimasi biopsiya materiallari bo'yicha

tadqiqotlar o'tkazildi. Patologik tadqiqotlar fibroz-kistoz mastopatiya tashxisini tasdiqladi.

Kalit so'zlar: fibrokistik mastopatiya, morfologiya, sut bezlari.

Relevance

The most common benign breast disease in women. It makes up 90% of the mammological flow. The frequency of occurrence of mastopathy in the population corresponds to 60–80%, and among women of reproductive age suffering from various gynecological diseases, it reaches 35–90% (Burdina L.M., 2007). Recent years have been characterized by a sharp increase in the frequency of hyperplastic processes and breast cancer. This is probably due to the progressive growth of diseases of civilization associated with metabolic disorders (obesity, hypertension, hyperlipidemia, hyperinsulinemia, diabetes mellitus), environmental ills, peculiarities of reproductive function, and psychogenic stress. The largest share among the benign pathology of the mammary glands is mastopathy or fibrocystic disease. The evolution of the concept of mastopathy over more than two centuries has taken place in a wide range: from the recognition of this pathology as an obligatory stage of neoplastic transformation to the rejection of the definition as a “disease”. The basis for the study of risk factors for the development of mastopathy was the idea that the nature of the pathological process in the mammary glands is determined by a violation of the normal course of their growth and development [21, 23]. It is known that during pregnancy the structural and functional organization of mammary gland tissues undergoes significant changes. Under the influence of estrogens, progesterone, prolactin, somatotropic hormone, insulin, glucocorticoids, the milk ducts grow, the epithelium proliferates, and new, most differentiated lobules of types III and IV are formed. Moreover, the mitotic activity of the epithelium is most pronounced in the first trimester of pregnancy, and in the second half, differentiation processes associated with the secretory activity of cells begin to predominate. Involution of breast tissue after lactation is accompanied by activation of cell apoptosis, which may have a protective role in relation to the subsequent development of tumors. The study found that patients with mastopathy, compared with healthy women in history, were 1.3 times less likely to have pregnancies, 1.5 times less likely to have childbirth; 2 times less often their first pregnancy ended in childbirth. Morphological changes in FCD gradually progress [3, 24–26]. First, diffuse changes appear in the form of ductal ectasia, cyst formation, stromal fibrosis, then focal nodes against the background of diffuse pathology. Further, hyperproliferation of the

epithelium in the ducts or breast lobule appears in the nodes. Allocate epithelial, myoepithelial and fibroepithelial types of proliferation. At the next stage of transformation, atypical cells appear in the proliferates.

Purpose of the study

The purpose of this study is to study the morphological features of fibrocystic mastopathy.

Research methods

During the examination, biopsy materials of 28 cases of surgically removed mammary glands were examined, the studies were carried out in the research laboratory of the Bukhara Regional Pathological and Anatomical Bureau. The isolated breast tissue was examined histopathologically. Staining with hematoxylin and eosin of general pathology. In case of general pathology, 1 piece 1.5×1.5 cm in size was cut out from each breast tissue and solidified in 10% neutralized formalin. After washing in running water for 2–4 h, it was dehydrated in concentrated alcohols and chloroform, poured into paraffin, and bricks were prepared. Sections of 5–8 μm were made from paraffin blocks and stained with hematoxylin and eosin. Histological preparations were viewed under lenses 10, 20, 40, 100 of a light microscope and the necessary areas were photographed.

Results

Of the 28 cases diagnosed with fibrocystic mastopathy, pathomorphological features were studied. Microscopic characteristics of breast tissue with fibrocystic mastopathy: epithelial proliferation is occasionally observed with the filling of the lumen of the intralobular ducts with masses of proliferating cells. Fibrous the stroma contains a few vessels of various sizes. The main structure of the mammary gland tissues is the ducts, their epithelium is two-layered, the lumens are dilated. There is an increase in the area of adipose tissue with the presence of a small amount of fibrous tissue with ducts. In the lobules, atrophy is observed. There is a high degree of development of fibrous and glandular components. In some places, the alveoli are stretched, with the formation of cysts, the lumens of the ducts are almost completely obliterated. Small dark-colored cells of the inner layer epithelium and larger myoepitheliocytes are located tightly to each other, as if layering. The connective tissue stroma of the organ is represented by a network of collagen and elastic fibers. In the surrounding connective tissue lobules there are tumor-like nodes formed by cell-free hyalinized fibrous tissue, which regarded as focal fibrosis. The study of the morphological

organization of breast tissues and the features of the manifestation of this pathology will allow a differentiated approach to the problems of prevention and treatment of diseases of the mammary glands.

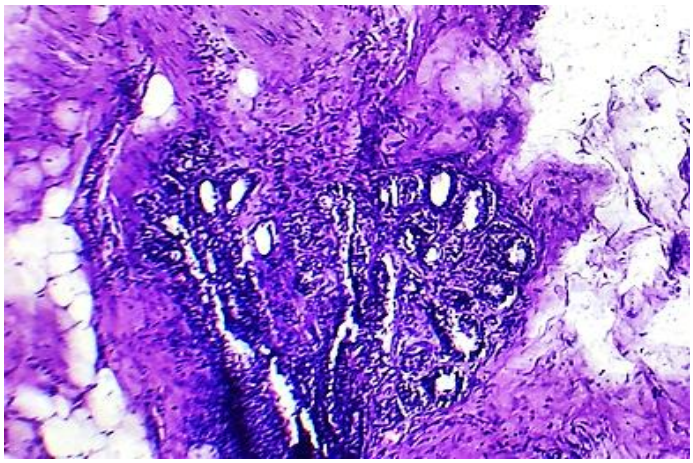

Photo 1. Atrophied glands with fibrosis. Hematoxylin-eosin stain. 10x20 rev.

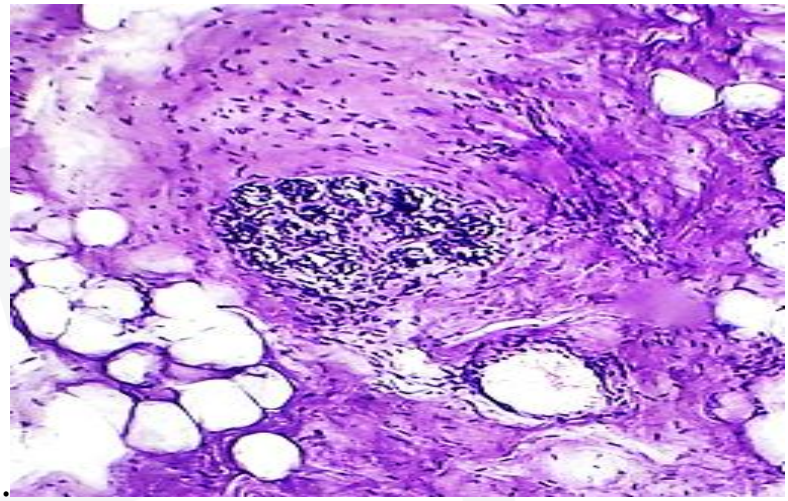

Photo 2. Mammary gland. atrophied glands. growth of fibrosis. Hematoxylin-eosin stain. 20x40 rev.

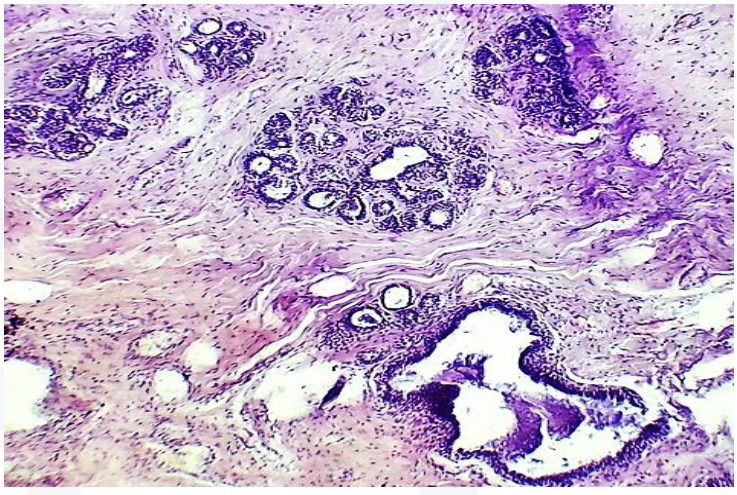

Photo 3. Cystic glands. Hematoxylin-eosin stain. 10x20 rev.

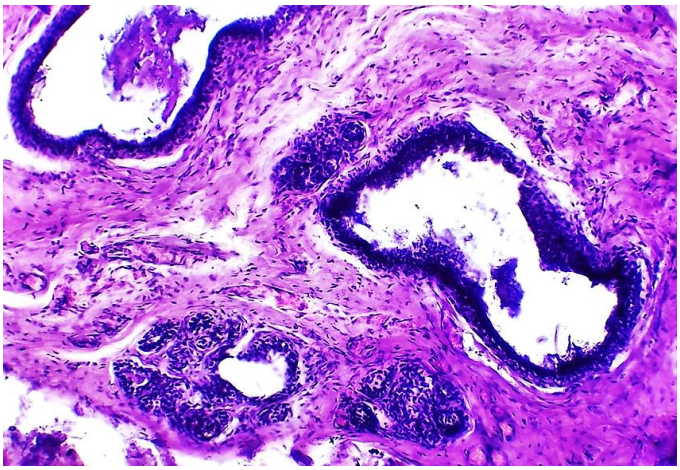

Photo 4. Cystic glands. fibrous growth. Hematoxylin-eosin stain. 20x40 rev.

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