

Non-Organic Benign Tumors: Fibromas

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Abstract

The causes of dermatofibroma and other forms of tumors of this type are not known. Some researchers believe that fibroids may form as a localized tissue reaction after minor trauma.

Sometimes fibroids can have a genetic component, especially in people of northern European descent. Some drugs, including beta-blockers, have been reported to cause changes in fibrous tissue. In addition, some fibromas may be affected by hormonal disruptions or pathologies of the endocrine organs, including problems with the thyroid and pancreas.

Hyperhidrosis (excessive sweating), inflammatory processes on the skin, especially chronic ones, as well as the effects of prolonged UV exposure, poor nutrition and the presence of bad habits can have a certain effect.

The article provides information about retroperitoneal-tumors, their occurrence in the experiment and their morphology. In experimental studies on white outbred rats, a tumor in the abdominal cavity was found in 1 case out of 30 rats. The isolated tumor was examined morphologically.

Keywords: fibroma, benign tumor, abdominal cavity, retroperitoneal-tumor.

Relevance

Inorganic retroperitoneal tumors are a group of neoplasms originating from the tissues of the retroperitoneal space, including adipose, muscle, connective and nervous tissue, lymph nodes, lymphatic and blood vessels, and embryonic elements. The group of retroperitoneal tumors does not include oncological processes in organs located in this space, as well as metastatic lesions of retroperitoneal lymph nodes in tumors of other localizations. The reasons for combining such

heterogeneous diseases into one group are similar features of the clinical course, common methods of diagnosis and therapy [3, 22].

Fibroids are classified as benign tumors. They form a tumor-like growth of tissues, inside which is mainly fibrous (or connective) tissue. Signs of fibroma occur as a result of uncontrolled by the body, but slow and limited growth of a certain area of tissue. Rarely, fibromas are malignant, and the reasons for this are traumatization and malignancy of the formation. Different types of fibromas can develop anywhere, and if they are small, require active monitoring or removal if they cause discomfort [1, 19].

Some women with uterine fibroids have no or only mild symptoms, while other women have more severe, debilitating symptoms. Common tumor symptoms include:

- ✓ heavy or prolonged menstrual flow;
- ✓ abnormal bleeding between periods;
- ✓ pain in the pelvic area;
- ✓ frequent urination;
- ✓ lumbago;
- ✓ pain during intercourse;
- ✓ infertility [4, 20].

The general symptoms of dermatofibroma are associated with discomfort and may come and go. Symptoms of dermatofibroma are not severe and include:

- ✓ color change over time;
- ✓ itching;
- ✓ periodic swelling over the tumor;
- ✓ possible bleeding in case of injury;
- ✓ sensitivity of dermatofibroma to touch;
- ✓ a small bump with a raised surface [8, 17].

Symptoms of a plantar fibroma are not severe and include:

- ✓ expansion in size over time;
- ✓ hard lump in the arch of the foot;
- ✓ pain with pressure, standing or walking;

✓ the spread of additional fibromas over time [6, 21].

Retroperitoneal tumors can be either malignant or benign. They are rare, according to various sources, they range from 0.03 to 0.3% of the total number of oncological diseases. Some experts believe that this figure is underestimated due to diagnostic difficulties in identifying this pathology. They are found predominantly at the age of 50 years and older. Representatives of both sexes suffer equally often [2, 18].

There are studies indicating an increased risk of developing certain types of neoplasms of this localization when exposed to herbicides and pesticides, especially dioxin and phenoxyacetic acid derivatives. The mechanism of stimulation of the growth of retroperitoneal tumors in such cases has not yet been elucidated. There are versions of both direct effects and indirect effects as a result of immune suppression during the toxic effects of chemicals [1, 7].

The etiology of retroperitoneal tumors is poorly understood. The factors predisposing to the development of this group of neoplasms include exposure to ionizing radiation, which is confirmed by cases of tumor development in patients who underwent radiation therapy for other diseases [11].

In the following century, quite a lot of scientific publications appeared concerning the problem of NZO. Unfortunately, most of them are based on few clinical observations or are descriptions of individual clinical cases. A number of foreign authors generally consider NSO in a single complex with soft tissue neoplasms, based only on their histogenesis, not taking into account localization, and it is the latter that largely determines the specificity of diagnostic and therapeutic tactics. This fact is mainly due to the rarity of this pathology. According to various authors, NSOs account for 0.03 to 1.0% of all human neoplasms [12, 17].

According to W. Wirbacz et al. (1963) for the first time a retroperitoneal tumor was described by Beniweni in 1507, who discovered it at autopsy. Subsequently, retroperitoneal lipoma was described by G.B. Morgagni (1761), who also discovered a tumor during the autopsy of a woman. Non-organ retroperitoneal tumors (NRTs) are quite rare and occur in less than 1% of all human neoplasms. These tumors are primary, developing from the reticular, adipose and connective tissues, fascia, muscles, blood and lymphatic vessels, and retroperitoneal lymph nodes. Metastatic lesions of the retroperitoneal lymph nodes, as well as formations whose organ affiliation has been determined, do not belong to NZO [13, 16].

In the Russian literature, NZO was first reported by N.N. Filippov and M.M. Kuznetsov in 1890. Later N.N. Petrov in 1905 described the clinical observation of retroperitoneal cystic lymphangioma. All this gives an important proposition that the first idea of the unresectable retroperitoneal tumor is often erroneous [6, 7, 13].

Fibromas are a group of benign neoplasms that affect various tissues of the human body. Tumors are formed from collagen fibers with different density and elasticity. Foci of pathology can be located on the skin, bones and walls of the internal organs of children and adults. Oncologists consider fibromatosis as a precancerous condition. Single or multiple fibromas can affect the lungs, mammary glands, liver, skin, oral mucosa, etc. The proliferation of connective tissue occurs under the influence of various factors: unfavorable environmental conditions, severe injuries, bacterial or viral infections [5, 16].

Purpose of the study

It is supposed to give the concept of non-organ abdominal tumors, to study the morphological and histopathological structure of the tumor, and to analyze the identified non-organ abdominal tumors during the experiment.

Research methods

During the study, 1 case out of 30 surgically removed abdominal tumors was identified, the studies were carried out in the research laboratory of the Bukhara State Medical Institute. At autopsy, a dense, inactive tumor formation with a smooth surface, 4.0x2.5 cm in size, was visualized. The upper pole of the neoplasm is connected with the visceral surface of the left lobe of the liver by loose adhesions. The tumor displaces the transverse colon and loops of the small intestine into the small pelvis. The isolated tumor tissue was examined by morphometric and histopathological methods. Staining with hematoxylin and eosin of general pathology. In case of general pathology, 1 piece 1.5x1.5 cm in size was excised from the tumor and solidified in 10% neutralized formalin. After washing in running water for 2–4 h, it was dehydrated in concentrated alcohols and chloroform, embedded in paraffin, and shaped into a brick 2x3 cm in size. 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.

Research results

The isolated tumor tissue, 4x2.5 cm in size, is round in shape, dense in consistency, filled with a mushy mass when cut (Fig. 1.2). Microscopic examination shows fibroblast cells and fibrocytes, lymphocytic infiltration, macrophages (Fig. 3.4). The isolated tumor was morphometrically and histologically examined and recognized as a fibroma.

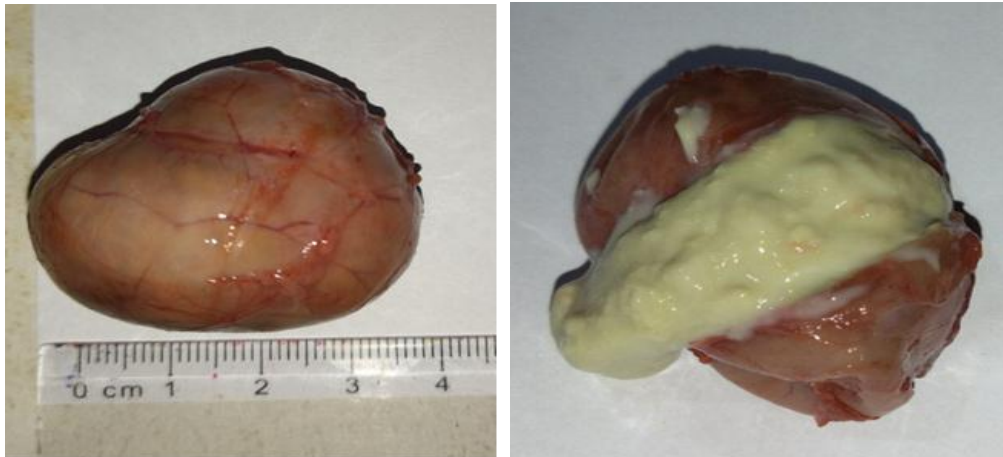


Fig 1, 2. Macroscopy of the tumor of the abdominal cavity.

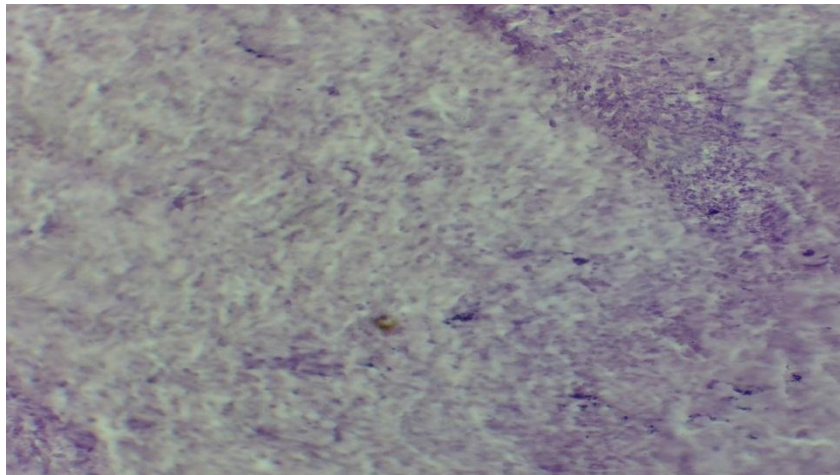


Fig 3. Fibroma. Staining with hematoxylin-eosin 10x20

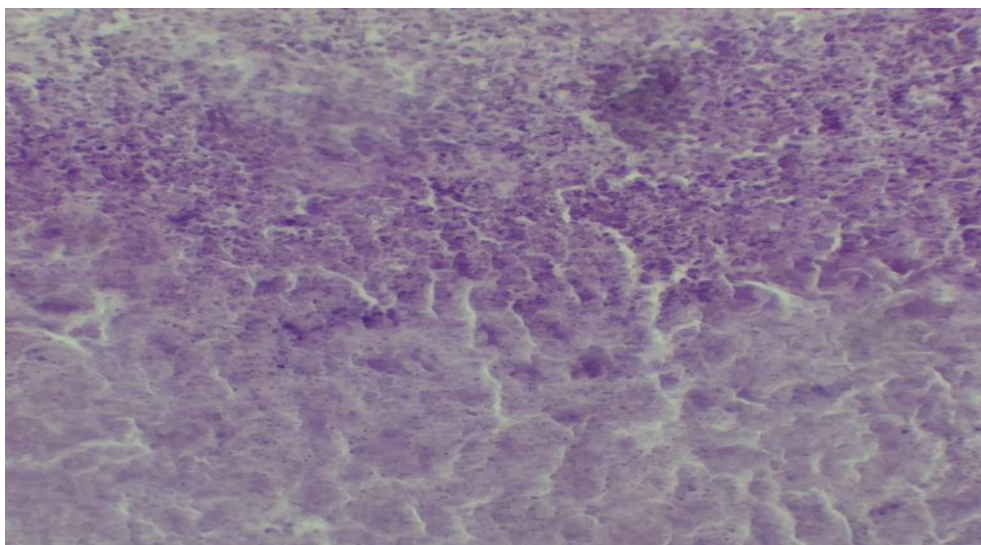


Fig 4. Fibroma. Fibroblast cells and fibrocytes, lymphocytic

infiltration, macrophages, hematoxylin-eosin staining 10x20

Conclusion

In conclusion, we can say that non-organ tumors can be benign and are an operative finding, or they can be detected postmortem.

The lack of a detailed description of the clinical material of retroperitoneal tumors generally does not allow for their correct analysis. But the available data indicate the need for further improvement of diagnostics and development of methods for additional therapeutic intervention in patients with NP.

In conclusion, it should be noted that today there are no objective signs of predicting the aggressive course of the disease or long-term stabilization against the background of drug treatment or even without treatment. The data available in the literature on possible spontaneous regressions of tumors should not be an excuse for a doctor's expectant tactics. Despite the fact that the surgical method is the main one in the treatment of retroperitoneal tumors, there are no specific methods for diagnosing and treating this pathology. But even active surgical tactics for retroperitoneal tumors cannot guarantee a recurrence of a retroperitoneal neoplasm. Treatment of patients with retroperitoneal tumors should be carried out in specialized oncological institutions

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