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CLINICAL CASES

Atypical giant lipomas

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Abstract

Background: The giant lipomas represent benign tumors of soft tissues. They are come across rather seldom and require a surgical treatment. According to the data of different studies, single lipomas are more common for women, while multiple lipomas are mainly characteristic of men. These tumors can develop at any age however they are rarely detected in children and youths. Patients usually describe lipomas as slowly growing formations, which do not cause any discomfort.

Material and methods: A short characteristic of giant lipomas as well as two cases of atypical giant lipomas – on the neck and retroperitoneal region – are reported in this paper. In the latter cases the giant lipomas have been removed surgically. A histological analysis has confirmed the primary diagnosis. The postoperative course has been uneventful.

Results: Roughly 60% of single cutaneous lipomas contain clonal genetic changes: the most frequent chromosomal aberrations include breaks of 12q13-15, but there can be changes in the arms of 6p and 13q. These mutations are not characteristic of the multiple lipomas. Typically, lipomas are identified in the subcutaneous tissues of the trunk and upper limbs, but they can seldom be found in internal organs.

Conclusions: At the first examination retroperitoneal lipomas can be taken for gastro-intestinal tumors. Abdominal lipomas are usually identified only when they become giant. Large-sized lipomas can compress the blood vessels and nerves in the vicinity and, as a result, induce abnormalities in blood circulation and paresthesia. There are difficulties in the surgical treatment of large, unusually located lipomas, which compress blood vessels, main nerves and internal organs.

Key words: atypical giant lipoma, subcutaneous lipoma, retroperitoneal lipoma.

Introduction

Lipomas are benign tumors originated from mature fat cells. They are the most common benign mesenchymal tumors covered with fibrous capsules. From the histological point of view, lipomas do not differ from adipose tissue, but in terms of the biochemical point of view lipomas differ from normal adipose tissue by the content of lipoprotein lipase and the presence of large number of precursor cells [1, 4]. Lipomas are classified by the following categories:

The single lipomas (the most frequent), that are superficial and small. They increase along with the body mass increase, but do not decrease with the weight loss [11].

Diffuse congenital lipomas. They are diffuse, not well demarcated, usually located on the trunk. They often infiltrate the muscle fibres, creating difficulties for surgical treatment. They consist of immature fat cells [11].

Symmetric benign lipomas are the lipomas of the head, neck, shoulders and upper limbs. Men are affected 4 times as frequent as women. Their medical history often includes excessive consumption of alcohol or diabetes [5, 6, 7].

Familial multiple lipomatosis. It ranges from a few to a large number of small lipomas, well demarcated, located on limbs. The lipomas typically appear during or immediately after adolescence period. They don't usually appear on the neck and shoulders (unlike symmetrical benign lipomatosis). They are characterized by a family aggregation and autosomal-dominant inheritance.

Dercum's disease (*adiposis dolorosa*). These type of lipo-

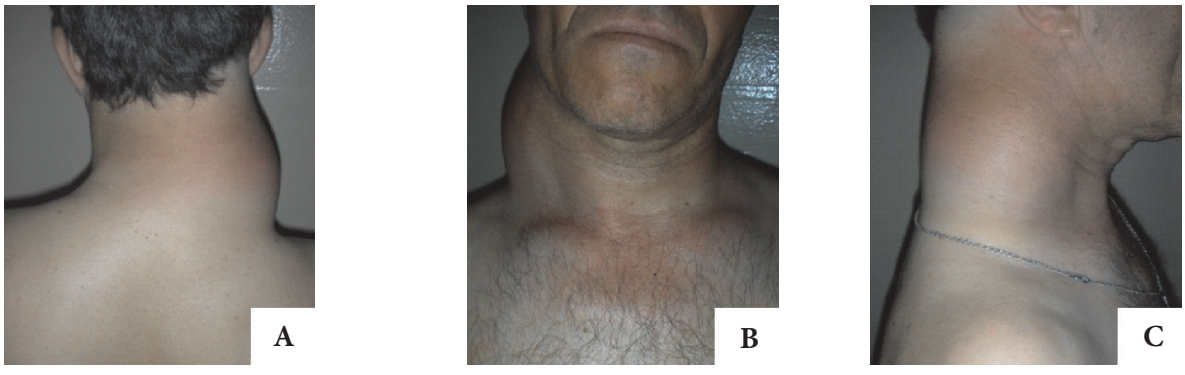

Fig. 1. The results of the inspection. A. Anterior vision. B. Posterior vision.

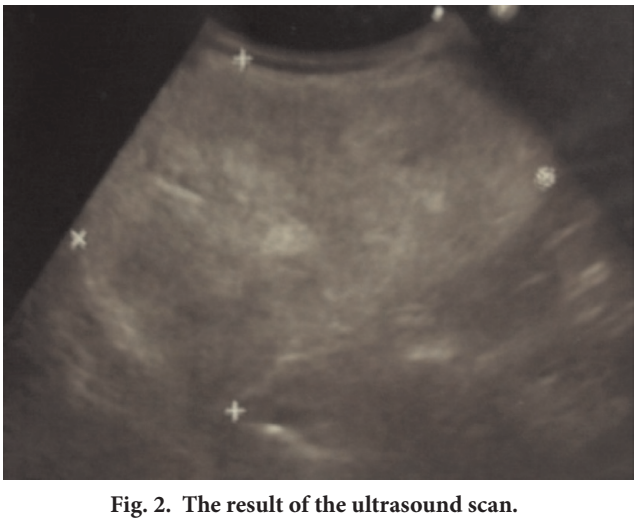

Fig. 2. The result of the ultrasound scan.

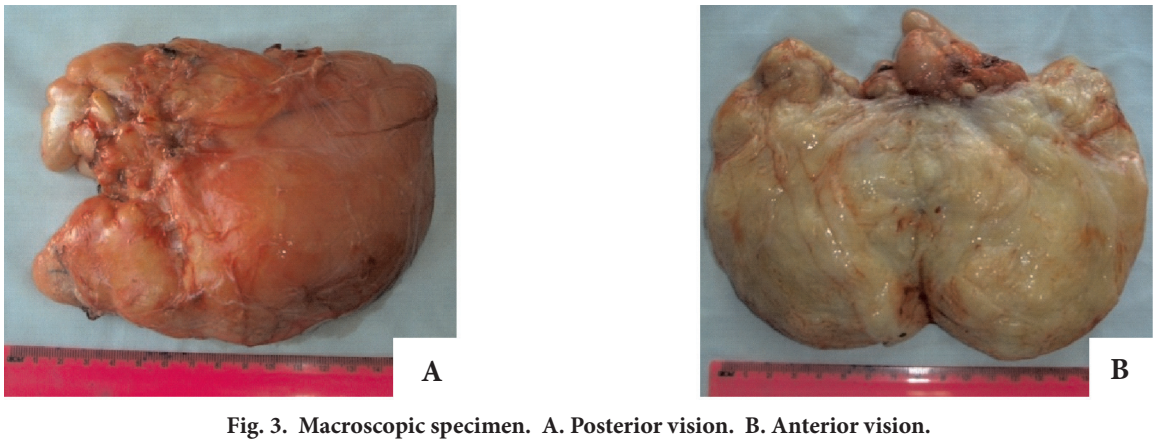

Fig. 3. Macroscopic specimen. A. Posterior vision. B. Anterior vision.

mas cause pain and they are usually located on limbs of postmenopausal obese women. These lipomas are often associated with alcoholism, depression and emotional instability [2, 3, 8].

Angiolipomas. Sensitive nodules, under the skin, present in adolescents. Often have multiple lobes and are tougher than other lipomas. The pain, associated with them, is vague and can be spontaneous or caused by pressure.

Hibernomas. They are represented by circular, well differentiated asymptomatic nodules. The typical location – interscapular region, groin, neck, or mediastinum. They consist of brown fat cells.

Lipomas are generally represented by subcutaneous nodules of 2-10 cm. The lipomas bigger than 5 cm are called giant lipomas. Often lipomas have numerous lobules. The skin that covers the tumor is normal and is not attached to the lipoma.

Lipomas are identified by the computer tomography (particularly, for differentiation of lipomas and liposarcomas) and ultrasonography. The lipomas of the digestive tract are met very seldom. Thus, the stomach lipomas represent only 1-3% of benign gastric tumors. In other sections of the digestive tract the distribution of lipomas is irregular. According to the data from modern literature, approximately 35% of small intestine lipomas are located in the duodenum [10].

Presentation of clinical cases

Case 1. In aseptic surgery department of Chisinau Municipal Clinical Hospital № 1 a 49- year-old man with a round mass in the cervical region has been admitted. First a small nodule with a dynamic growth appeared, and then the patient was sick for about 26 years. A primary inspection has shown the presence of the singular nodular formation on the right side of the cervical region. The dimension of the formation has been about 20x10 cm, which has determined the deformation of the neck. While palpating it has appeared subcutaneous, soft, oval and painless, with a regular shape (fig. 1).

The ultrasound scan has shown the presence of the formation of a regular shape on the right side of the cervical region, which has consisted of an adipose tissue, and the presence of separate vessels.

Its dimensions have been 90 x 66 mm in the sagittal section, and in the frontal region it has not been possible to perform the measurement. The USG diagnosis conclusion has been giant lipoma (fig. 2).

The decision has been to surgically eliminate the lipoma. Under the general anaesthesia, the skin has been incised from the mastoid process to the upper right margin of the clavicle on the right. The muscle *platisma* has been cut, the tumour has been mobilized by a blunt way, then the lipoma has been discarded. The remaining area has been drained with a perforation tube of Redon type. The postoperative wound has been sutured by layers, and aseptic dressing has been applied.

The removed lipoma has had 15 x 20 x 18 cm in size, has been firm, elastic, and a content of adipose tissue and fibrin (fig. 3) has been found at the transection. The histological analysis has shown multiple lobules of adipose tissue, which has included the areas of fibro-connective tissue. The histological analysis conclusion has been a fibrolipoma. The postoperative period has had a favorable evolution.

Case 2. In the septic obstetrics department of the Chisinau Municipal Clinical Hospital № 1 a 47-year-old patient has been hospitalized on emergency with the following symptoms: pain in the lower abdomen and lumbar region, general weakness, fever 38.4°C, discomfort, the presence of an alien body in the abdominal cavity, the feeling of heaviness in the stomach area. According to the patient, the disease started 4 days before her appeal to the doctor, that is, when the first complain appeared.

Vaginal examination has shown an increased uterus with myomatous nodules, pain at a palpation, mucous secretions. The transvaginal ultrasound scan has identified a diffuse cervical myoma of about 15 weeks old and a polyp on the endometrium.

The diagnosis at hospitalization has been pelviperitonitis, nodular cervical myoma, necrosis of the myomatous nodule, polyposis of the endometrium.

It has been decided to perform a midline laparotomy. During the inspection of the peritoneal cavity organs, a tumor of 30 x 40 cm has been identified; it has been mobile, with indistinct outline, yellow-gray in color, with accretion in retro-peritoneal space between Treitz ligament and mesocolon. After opening the omental bursa, it has been found that the tumor has not accreted with mesocolon. Metastases or other pathological formations in liver and mesenteric colon have not been identified. The tumor has been mobilized and removed. The tumor weight has been ≈ 1.5 kg. An increased uterus with multiple sub-serous myomatous nodules has been visualized in the pelvic cavity. A white-gray soft nodule of 3 x 4 cm coated with fibrin has been noticed on the posterior wall. The serous of the uterus has been slightly hyperemic and the uterine appendages without any peculiarities. A subtotal hysterectomy has been made without touching the appendages, followed by the drainage of the pelvic cavity.

The postoperative diagnosis has been retroperitoneal lipoma (or liposarcoma?), cervical myoma, ischemic necrosis of the myomatous nodule and pelvic peritonitis.

The macroscopic analysis has shown a formation of 30 x 14 x 7,5 cm, elastic at a palpation, rough, with a 17 x 7 cm long sector, with several lobules, yellow-pink in color. At the cross-section a yellow lobular formation with 2 x 2 cm reddish areas, dirty-yellow in the middle has been detected. Also small, dirty-pink, ovoid formations of 1.5 cm, dirty-yellow in the middle have been detected.

The histological analysis confirmed a lipoma with severe bleeding. The postoperative period had a favorable evolution.

Results and discussion

According to the data from the literature, the exact incidence of lipomas is unknown, but it is probably much higher than reported, as most of the cases of the lipomas are ignored because of their quiet evolution [5]. Lipomas usually grow at a very slow rate, and the etiology of a rapid growth into giant lipomas is still a matter of debate [1]. They typically arise in the fourth to sixth decade of life. Liposarcomas consist of lipoblasts and may occur wherever fat is present, but they are most commonly found within intramuscular fat tissue. The histological subtypes of liposarcomas include well differentiated, myxoid, round cells and pleomorphic liposarcomas. Well-differentiated liposarcomas exhibit low malignant potential, myxoid liposarcomas display an intermediate malignant behaviour, and round cells and pleomorphic liposarcomas exhibit aggressive behaviour with early metastasis [1, 8].

Lipomas may have a family aggregation and can be found most frequently in obese people, people with diabetes and hypercholesterolemia, or in those people who have suffered a traumatic injury. Roughly 60% of single cutaneous lipomas contain clonal genetic changes: the most frequent chromosomal aberrations include breaks in the 12q13-15, but there can be changes in the arms of 6p and 13q.

These mutations are not characteristic of multiple lipomas [11]. None of these features is applicable to the cases of the patients described in the article. Although a benign lipoma can occur in any region of the body where the fat tissue is present, mesenteric lipomas are rarely reported. In general, they are produced as a result of slow growing, do not form lobules, are soft, mobile, do not penetrate into neighbouring organs. Most mesenteric lipomas are identified accidentally or when they become huge. Their uncommon symptoms include

anorexia, abdominal distension, weight loss, abdominal pain, constipation and the sensation of fullness, especially after meals. When the tumour grows close to the intestinal lumen and away from the mesenteric root, it can cause the abdominal pain by pressing upon the intestinal loops; however, the passage of the intestinal contents may be allowed like in our case due to the consistency of the lipoma and the liquid nature of small intestine contents [9].

Conclusions

Retroperitoneal lipomas can be wrongly considered to be gastro-intestinal tumors at the first examination.

Abdominal lipomas are usually identified only when they become giant.

Large-sized lipomas can compress blood vessels and nerves in the vicinity and as a result induce abnormalities in blood circulation and paresthesia.

There are difficulties in surgical treatment of large, unusually located lipomas, which compress blood vessels, main nerves and internal organs.

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Visceral leishmaniasis in the Republic of Moldova

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Abstract

Background: Leishmaniasis is a parasitic disease that is found in parts of the tropics and subtropics countrics. It is classified as a Neglected Tropical Disease. Leishmaniasis is caused by the infection with *Leishmania* parasites, which are spread by the bite of phlebotomine sand flies. There are several different forms of leishmaniasis in people. The most common forms are cutaneous leishmaniasis, which causes skin sores, and visceral leishmaniasis, which affects several internal organs (usually spleen, liver, and bone marrow).

Material and methods: A girl of one year old from Georgia who came in visit in the Republic of Moldova at her relatives. After acute debut with fever, dyspepsia, asthenia, patient subjected conventional treatment for such situations. Because of the lack of the well outcome she underwent sternal punction. At morphological assessment, have been found intracellular inclusions specific for *Lesishmaniasis*. Biological material has been directed towards National Centre of Public Health where was identified *Leishmania spp*.

Conclusions: This was the first case of leishmaniasis in Moldova. The disease has been imported from an endemic zone for *Leishmaniasis*. This case shows that is necessary to be vigilant in diagnosing of exotic diseases.

Key words: visceral leishmaniasis, imported case.

Leishmanioza viscerală în Republica Moldova

Introducere

Leishmanioza este o boală parazitară, provocată de un protozoar din genul *Leishmania*. Genul *Leishmania* întrunește mai multe specii, care morfologic sunt similare în toate stadiile de dezvoltare, dar diferă din punct de vedere biochimic, clinic și epidemiologic:

- *L. donovani*, include 4 subspecii;
- *L. tropica,* include 3 subspecii;
- *L. mexicana,* include 4 subspecii;
- *L. brasiliensis,* include 3 subspecii.

Aceste tipuri și subspecii sunt corelate cu relațiile gazdă – vector și cu sindroamele clinice la om și pot exista sub 2 forme: amastigotul (*leishmania*) – se dezvoltă în organismul vertebratelor și promastigotul (*leptomonas*) – se dezvoltă în organismul vectorului.

L. donovani provoacă la om leishmanioza viscerală (boa-