

Current Evaluations of Lipomas

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Abstract

We investigated the subcutaneous lipomas frequently met in practical surgery in our study. We observed the cases with lipomas found in different anatomical sites of the body according to the age, gender and compared with the recent studies published in the literature. New developing non-invasive treatment options and classical surgical cures were investigated in our study. It's emphasized the importance of the histological diagnosis of the lipomas and leaving minimal scar formation postoperatively in this article.

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Background

The operation of the subcutaneous lipomas in outpatient cases is frequently done in surgical practice. There have been recent clinical studies made about the lipomas until today. Our aim is to develop these studies by observing the operated cases with subcutaneous lipomas in our clinic and provide continuance of the studies.

Materials and Method

This study included the operated patients with subcutaneous lipomas in our clinic between October 2012 and March 2013 during the 4 months period retrospectively. Age, gender, histopathological diagnosis and the distribution of the lipomas on the body areas were investigated in our clinical study.

Results

102 patients were operated during the signified 4 months of period. The ratio of female/male patients is 57/45. The ages of the cases included in the study range between 17 and 82. The histopathological diagnosis of the cases were evaluated. 24 of the cases were fibrolipoma, 12 of them angiolipoma and 66 of cases were lipoma histologically.

The distribution of the localized lipomas according to the anatomical sites:

- Head and neck localized : 8 female patients, 9 male patients,
- Upper extremity localized: 20 female patients (17 proximal upper extremity and 3 distal upper extremity). 14 male patients (11 proximal upper extremity, 3 distal upper extremity),

-Trunk localized: 25 female patients, 14 male patients,

-Lower extremity localized: 9 female patients (7 proximal lower extremity, 2 distal lower extremity) 3 male patients (3 proximal lower extremity, 0 distal lower extremity).

Discussion

Lipomas are soft tissue tumors that are originated from the adipose tissue. Etiology of the lipomas is unclear, but they have benign formation. It's rarely evolute to malign formation, but there were some recent cases notified in the literature that big lipomas (>10 centimeters) transformed to sarcomas [1].

Lipomas are usually located in the subcutaneous adipose tissue. Females have more subcutaneous fatty tissue than males. We found that women have more lipomas. Our series may be correlate with this. In our body, subcutaneous fatty tissue is more found in trunk, upper and lower proximal extremity rather than other anatomically regions. In our series we frequently seen lipomas in there. So it may be said that where subcutaneous fatty tissue is more found, lipomas are more frequently seen in there. They are also situated in different localizations like intraperitoneal localization, retroperitoneal localization, intramuscular and in breast tissue. They can also found in the wall of the stomach, duodenum, ileum and colon . Lipomas are generally asymptomatic

tumors. Patients usually consult a physician noticing these subcutaneous tumoral masses by themselves. They are palpated as mobile, soft, elastic, and smooth surfaced masses in the physical examination. Physical examination is mostly enough in diagnosis. On the other hand screening methods are also used. Superficial tissue ultrasound is very useful in diagnosis because it gives typical demonstrative appearance of the lipomas to recognize them [2].

Subcutaneous soft tissue tumors must be considered in differential diagnosis of the lipomas. Mesenchymal tumors, skin appendage lesions, metastatic tumors and the other tumoral lesions are among these masses [3]. They have to be checked before making diagnosis.

Lipomas are soft tissue tumors formed by well demarcated mature adipocytes histologically. They are classified as fibrolipoma, angioliipoma, chondrolipoma, osteoliipoma and myxoliipoma [4]. The structures in the masses specify these definitions. For instance it's defined as angioliipoma if the vascular structure is prominent [5]. They're frequently seen in women [6]. They're situated especially on trunk and proximal extremity [7]. Anatomical distribution in our cases matched with the other cases in the studies noticed in the literature.

The treatment of the lipomas can be invasive or non-invasive. It's possible to minimize the mass in lipoma by high-intensity focused ultrasound (HIFU) as a non-invasive method [8]. Another procedure is using lasers. Lipolysed lipomas by using lasers can be extracted by liposuction method [9]. We think that the

diagnosis must be confirmed histologically in these treatments before the operation.

We consider that it's the ideal way to extract the lipomas totally for cure. Local anaesthesia or general anaesthesia for big lipomas can be preferred. Totally extracted lipomas must be examined for the histological diagnosis. On the other hand it's important to take care of the skin lines to get minimal incision scar during the surgical operation. Langer determined parallel lines on the cadavers in his study to reduce the scar formation after surgical incisions. These lines named Langer varied on human beings [10].

Lipoma gets unattached with an obtuse and sharp dissection after passing skin and subskin layers during the extraction. There is a vasculare structure (arteries and veins) nourishing the lipoma tissue so it can be a reason for minimal bleeding. Electrocauterization may be done for controlling the bleeding. After lipoma extraction it's needed to be careful not to leave any space between the tissues. For this purpose absorbable sutures (polyglycolic acid or polyglactin) can be used attaching the tissues. It's also used absorbable or polypropylene suture for the skin connection. Completing the suturation with a subcutaneous suture may reduce the scar formation.

In conclusion, even if we get the diagnosis of the lipomas by physical examination and screening methods, histological diagnosis is needed in frequent cases. We believe that it has to be taken care of patient comfort maximally during operation. The other important point is to watch out leaving minimal scar after the operation.

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