



Editorial

Anatomical Distribution of Intramuscular Lipomas

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Submitted: 04 April 2017**Approved:** 17 April 2017**Published:** 19 April 2017

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EDITORIAL

Lipomas are the most common type of soft tissue tumor occurring in the subcutaneous tissue. Rarely, lipomas present in the deep soft tissue such as intermuscular, intramuscular, and parosteal sites. When they occur within a skeletal muscle they are called intramuscular lipomas. Intramuscular lipomas may involve both children and adults. They are benign, nontender, deep located, circumscribed but unencapsulated lesions. Intramuscular lipomas account less than 1% of all lipomas. Most are located within a single muscle (solitary), while cases involving two or more muscles are very rare. They present with typical histological features. They may be divided into the infiltrative, the well-circumscribed and the mixed type. Differential diagnosis of the infiltrative type from liposarcoma is very difficult. Local recurrence may be evident if the surgical margin is not clear. They can occur in almost any anatomical site [1-15].

Intramuscular lipomas of the head may involve the tongue, which is one of the most commonly involved sites [16-24] or the tongue and the submandibular space [25]. They may also involve the cheek [26], the nose [27], the masseter [28] and the temporalis muscle [29,30]. In the eye the orbicularis oculi muscle and the eyelid [31], the superior oblique muscle [32], the superior rectus [33], the medial rectus in a child [34] have been involved.

Intramuscular lipomas of the neck [35] may be localized in the longus colli muscle [36], the platysma [14], the sternocleidomastoid muscle [37-40], the paraspinal muscles [41] and may be retropharyngeal or laryngeal infiltrating [42,43].

The chest wall [44,45] and the intercostal muscles [46] may also be involved. It may appear as a breast mass involving the pectoralis major [47-49] and may also involve the heart; involvement of the left ventricular myocardium, extending to the epicardial space; has also been reported [50]. The large muscles of the trunk may be involved such as the trapezius, the latissimus dorsi, the rhomboid major and the muscles of the anterior abdominal wall [14,51].

Intramuscular lipomas of the limbs may involve the thigh [52-54] and the shoulder [55], which are the most common locations [56-58]. The biceps brachii [59], the subscapularis [60], the deltoid [61-63], the supraspinatus [64,65], the infraspinatus [66] and the brachioradialis [67] may be involved, while localization adjacent to the proximal radius may be complicated by symptomatic radial nerve compression [68-70]. Involvement of the tensor fascia lata has also been reported [71] as well as of the vastus lateralis [51] and of the gluteus maximus and gastrocnemius [14].

Intramuscular lipomas of the hand and foot are rare. They may be associated with painful wrist triggering with associated carpal tunnel syndrome caused by an intramuscular lipoma of the lumbrical muscle [72,73]. They may be localized to the thenar [74-78], in the thenar or hypothenar muscles [79], to the abductor digiti minimi [80], to the extensors [81] and to the flexor hallucis brevis [82].

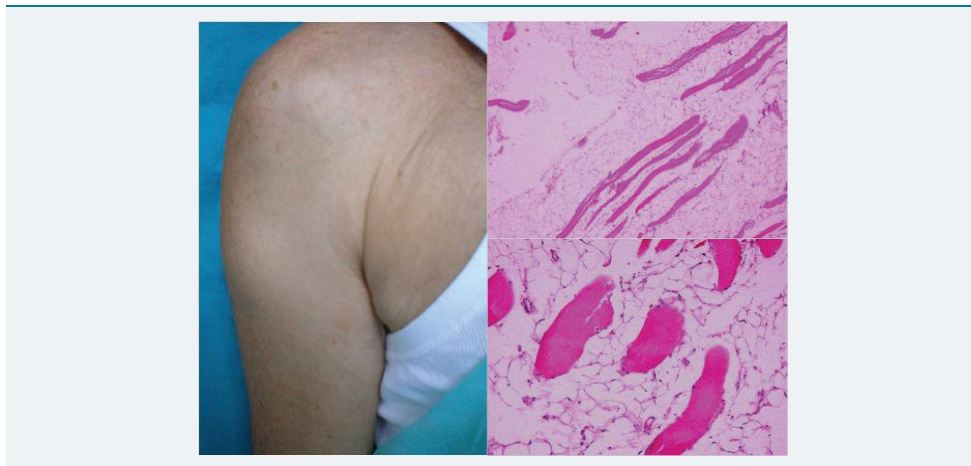


Figure 1: A 65-year-old man with an intramuscular lipoma of the long head of the triceps brachii muscle. Low-power and high-power views of the tumor showed mature fat cells between and among slightly atrophic skeletal muscle fibers.

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