# Intramuscular Hemangioma

# Definition

Intramuscular hemangioma is a benign lesion of vascular origin. It is still debated whether to consider intramuscular hemangioma a tumor or a malformation. It is also known as intramuscular angioma and intramuscular infiltrating angiolipoma. It belongs to the family of hemangiomas ( $\rightarrow$  see Chap. 117).

# **Epidemiology and Presentation**

Intramuscular hemangioma is one of the most frequent deep-seated soft tissue tumors. Adolescents and young adults are most frequently affected (up to 90% of cases), with no difference between males and females. It arises most commonly in the lower limbs, followed by the head and neck, upper limbs, and trunk. Exceptional cases have been described in the cardiac muscle.

Typically, the lesion presents as a slow-growing mass that can be painful, especially after exercise and when the lesion is located in the lower limbs. X-ray-based imaging often shows the presence of calcification, but magnetic resonance imaging is the best radiological technique to establish the diagnosis.

#### Pathology

Intramuscular hemangioma is a proliferation of benign vascular channels within skeletal muscle, typically associated with variable amounts of mature adipose tissue. Like other hemangiomas, intramuscular hemangioma is traditionally classified into capillary and cavernous subtypes based on the vessel size (small and large, respectively), although mixed forms are frequent.



135

# Prognosis

Although classified as a benign lesion, intramuscular hemangioma tends to recur frequently (up to 50% of cases).

# Therapy

Surgical (wide) excision is the treatment of choice.

# **Suggested Readings**

Fletcher (2020) WHO classification of tumours of soft tissue and bone (5th edition)

- Kandil (2009) Image of the month. Rectus abdominis intramuscular hemangioma. Arch Surg 144(2):191–192
- Liu (2019) Intramuscular hemangioma within the biceps brachii causing the limitations of elbow extension and forearm pronation: A case report. Medicine (Baltimore) 98(5):e14343