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Case report - Vascular general

Intramuscular cavernous hemangioma in the left soleus muscle: successful surgical treatment

Nikola Hristov*, Zvonko Atanasov, Gjorgje Zafirovski, Zan Mitrev

Department of Surgery, Filip Vtori Special Hospital for Surgery, Skopje, Macedonia

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Abstract

We describe here the case of a 16-year-old boy successfully treated at our hospital for intramuscular cavernous hemangioma in the left soleus muscle. The patient was diagnosed using magnetic resonance imaging and open biopsy after attempted/failed surgery at another institution. We performed lower leg phlebography in order to identify all the feeding and draining veins of the cavernous hemangioma. Our surgical approach of ligation of the feeding and draining veins of the intramuscular cavernous hemangioma with subsequent thrombosis of the hemangioma proved successful, resulting in cure with no operative or postoperative complications, a minimal hospital stay and a good functional and cosmetic outcome.

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Keywords: Cavernous hemangioma; Phlebography

1. Introduction

Intramuscular cavernous hemangiomas are very rare [1, 2] and may pose a diagnostic challenge. When they are limited in size, wide local excision is a treatment of choice. However, if the lesion has spread more diffusely into the muscle, the morbidity created by extensive muscle resection has to be weighed against the morbidity of the condition.

2. Case report

A 16-year-old boy presented in our hospital with pain in his lower left leg and a history of cavernous hemangioma in the same location, diagnosed with magnetic resonance imaging and open biopsy after attempted/failed surgery at another institution (Fig. 1).

On examination, the left leg was slightly edematous below the knee, with a scar from the previous surgery. We performed phlebography in order to identify all the feeding and draining veins of the cavernous hemangioma (Video 1). A decision was made to proceed to surgery.

We placed the incision medially, just underneath the medial border of the shinbone. The cavernous hemangioma appeared through the medial entrance in the superficial posterior compartment of the left leg, interpolated with the soleus muscle fibers. The hemangioma measured 15 cm long, 5 cm wide and 5 cm high. All the feeding and draining veins

were carefully identified and suture-ligated. No attempt was made to completely remove the hemangioma.

Following hemostasis, the wound was closed in layers. The patient was discharged home the following day. At the



Fig. 1. Postoperative image of the left leg.

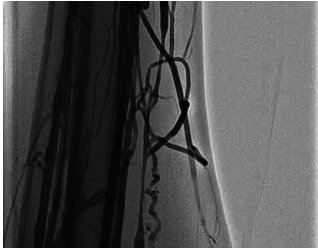


Video 1. Preoperative phlebography of the left leg identifying the feeding and draining veins of the intramuscular cavernous hemangioma.

*Corresponding author. Tel.: +389-2-3091500; fax: +389-2-3091499.

E-mail address: hristov@cardiosurgery.com.mk (N. Hristov).

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Video 2. Postoperative phlebography of the left leg, with completely normal deep and superficial veins and no signs of the cavernous hemangioma.

6-month follow-up, the left leg was completely normal and control phlebography was performed, with excellent results (Video 2).

3. Conclusions

Our surgical approach of ligation of the feeding and draining veins of the intramuscular cavernous hemangioma with subsequent thrombosis of the hemangioma proved successful, resulting in a cure with no operative and postoperative complications, a minimal hospital stay and a good functional and cosmetic outcome.

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