

## A 6-Month-Old Girl with Infantile Hemangioma of Left Lower Limb, a Case Report

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Received: 7 October, 2018

Accepted: 22 February, 2020

### ARTICLE INFO

#### Article type:

Case Report

#### Keywords:

Infantile  
Hemangioma  
Limb  
Systemic glucocorticoid

### Abstract

**Introduction:** Hemangiomas are the most common tumors of infancy and infantile hemangiomas are the most common vascular tumors. The etiology of this tumor is unknown. Hemangiomas commonly occur in the skin followed by the deep tissues (intramuscular) and rarely within bones.

**Case Presentation:** Hereby, the case of a 6-month-old girl whose whole left lower limb from thigh to ankle was involved with Hemangioma is reported. She had thrombocytopenia in lab data and abnormal coagulations profile. Biopsy was performed and treatment started base on diagnosis (Hemangioma). One month later, the swelling mildly decreased and platelet count raised.

**Conclusions:** Small hemangiomas do not need any treatment and are resolved spontaneously. However, gross or complicated hemangiomas need medical or surgical treatment. Propranolol, systemic glucocorticoids, vincristine and interferon alfa are alternative agents for medical treatment. Finally, surgical techniques, such as resection or amputation of limb, may still be the mainstay of treatment for lesions that do not respond.

### Introduction

Hemangiomas are the most common tumors of infancy and infantile hemangiomas are the most common vascular tumors (1). Despite their benign and self-limited nature, some hemangiomas can cause complications (2). Hemangiomas commonly occur in the head and neck region (60%), followed by the trunk (25%) and then the extremities (15%) (3).

Intramuscular hemangioma is a unique type of hemangioma and a rare tumor accounting for 0.8% of all hemangiomas. It is most frequently located in the thigh (36%), followed by the calf (17%) (4).

We report a case of diffuse hemangioma involving both skin and muscles of the left lower limb.

### Case report

A 6-month-old girl was admitted with whole lower limb swelling from thigh to ankle. Swelling started in the second month after birth and increased gradually.

Physical examination showed only massive swelling of left lower limb (Figure 1 and 2)



**Figure 1.** Massive swelling of left lower limb (compared to cell phone)



**Figure 2.** Massive swelling of left lower limb

There was no ulceration of the skin and the examination of other parts of the skin showed no abnormalities.

Laboratory evaluation revealed WBC 6600/L (neutrophils 36%, lymphocytes 64%), HGB 8.8 g/L and platelet count of  $13 \times 10^9/L$ .

Fibrin degradation products and D-dimer had been elevated.

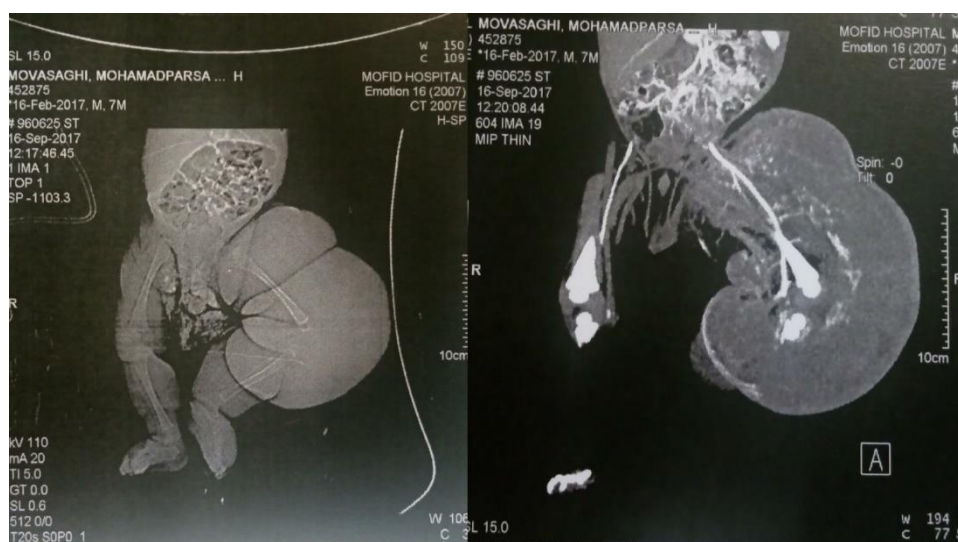
Prothrombin time was 15s (control: 13s) and activated partial thromboplastin time was 36s

(control: 29s).

Abdominopelvic sonography was normal.

Echocardiography was performed and showed normal cardiac function.

Computed tomography (CT) scan was performed on the lower limb and revealed a soft-tissue mass of relative iso-attenuation to muscle (Figure 3).



**Figure 3.** CT scan revealing a soft-tissue mass iso-attenuated to muscle

Surgical consultation was obtained and although surgical intervention seemed impossible, biopsy was performed.

The Pathology report showed angiomatous spaces dissecting between skeletal muscle bundles and evidence of diffuse cavernous hemangioma, which involved skin and muscles.

Treatment with FFP and platelet transfusion started and prednisolone (2mg/kg/day) was orally administered. One month later, the swelling mildly decreased and platelet count raised to  $55 \times 10^9/L$ . This treatment continued for the patient.

## Discussion

Hemangiomas are the most common benign soft tissue tumors of infancy comprising 7% of all soft tissue tumors (5). Etiology of this tumor is unknown (2).

The choice of treatment for infantile hemangiomas should be individualized, based on the location and presence of complications. Small hemangiomas do not need any treatment and are resolved spontaneously by age. Nevertheless, gross or complicated hemangiomas need medical or surgical treatment (6).

Propranolol, systemic glucocorticoids, vincristine and interferon alfa are alternative agents for treatment (7).

Arterial embolization after failure of medical therapy, with temporary results, is a treatment approach in special cases (8).

Finally, surgical techniques, such as resection or amputation of limb, may still be the mainstay of treatment for lesions that do not respond, or are not amenable to medical treatment and for those that are life-threatening (9).

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## Conclusion

The main approaches to treatment of these lesions should be individualized based upon size, rate of growth, location and possible complications of hemangiomas.

## Conflict of Interest

The authors have no financial or personal relations that could state a conflict of interest.