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### RESEARCH ARTICLE

#### CAVERNOUS HAEMANGIOMA A CASE REPORT

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#### Abstract

A Cavernous Hemangioma is an abnormal tangle of tightly packed thin walled capillaries that are prone to bleeding.

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#### Introduction:-

A Cavernous Hemangioma is an abnormal tangle of tightly packed, thin walled capillaries (smallest blood vessel). The thin walls of these capillaries make hemangiomas prone to bleeding. The blood within the capillaries is usually slow, moving or not moving at all.

Cavernous Hemangioma mostly occurs in brain, spine or any area of body. A Cavernous Hemangioma looks like a raspberry. It has blood-filled spaces separated by connective tissues. Hemangioma can range in size from fraction of an inch to dime-sized or larger.

Cavernous Hemangioma can affect about 1 in 200 people. They are usually discovered between the ages of 20 and 30 years of age. Although they are quite common, only 1 in 10 people will ever develop symptoms.

#### A Case Report

A 5-year-old child was admitted in our hospital suffering from Pain & Swelling left palm. CT Angiogram showed large non-enhancing lesion of about 2.4\*2.cm seen in hypothenar muscle of left palm with multiple tiny calcification.

#### Micro

Histopathological examination of the specimen showed Fibrous tissue containing a few intercommunicative vascular channels lined by attenuated vascular channel.

#### Final Diagnosis

Cavernous Hemangioma Left Palm

#### Symptoms

Swelling & Uneasiness, appear as raised lesions or tumours in the skin Profuse bleeding if injury

#### Causes

They are more common in  
 Infants with low birth weight  
 Premature infants  
 Causcasian infants

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Most cavernous Hemangioma occur as sporadic form , occur as a single formation with out an apparent cause and without any family history. The sporadic form often has an associated Developmental Venous Anomaly ( DVA ) which is an irregular vein with a Witches Broom appearance

However roughly 20% of affected people have a genetic(inherited) form of the disorder( familial cavernous malformation syndrome). In many cases , such people can identify similarly affected family members, most often with multiple malformation. A diagnosis of the inherited form can be confirmed by Genetic testing. Genetic testing is often recommended for people who have  
MRI evidence of multiple CCMS without a DVA  
A family history of CCMS

To date, research has identified three genetic variants responsible for inherited Cavernous Hemangioma malformation have been traced  
KRIT 1 also called CCM 1  
CCM 2  
PDCD 10 , also called CCM 3

**Discussion:-**

A Hemangioma of skin is an abnormal buildup of blood vessels on or under the surface of the skin. Infantile Hemangioma are a specific type of Hemangioma that appear most frequently on the trunk of the body but they can also appear on the face or neck. They develop soon after birth and can affect both boys & girls. Hemangioma can occur on the top layer of skin or deeper in the body. Treatment depends on a multitude of factors including size ,location, whether or not, they are ulcerated.

Hemangioma look painful but they don't typically cause any discomfort. They are non-cancerous & complications are rare.

Hemangioma are usually small but they can grow to be quite large. They normally begin as small spots or red patches on the skin that form during the first 2 or 2 weeks of life . Hemangioma in infants tend to grow rapidly for the following 4-6 months. After this period of growth, Hemangioma enter a resting phase. They usually remain the same size for several months or years and then begin to shrink.

**Diagnosis**

By looking  
Biopsy  
MRI or CT scan for deeper Hemangioma  
Doppler Ultrasound to see blood flow through hemangioma.

**Treatment**

Superficial Hemangioma  
No Treatment  
Large Hemangioma. If bleeds & causes discomfort  
Surgery  
Laser treatment  
Topical TIMOLOL MALEATE  
for thin or superficial hemangioma  
Oral Propranolol  
Corticosteroids. - prednisolone  
Orally  
Topically  
Injected into hemangioma  
Vincristine  
for infantile hemangioma not responding to other treatment

**Complications**

Ulceration ( bleeding)

Vision changes ( if hemangioma is on the eye)  
Difficulty in breathing ( if the hemangioma is large. and in the throat or nose)  
Secondary infection



**Conclusion:-**

Hemangioma, although benign tumour of the vascular endothelium, can cause functional impairment and life threatening complications, Medical, Surgical and embolisation treatment are current option .

Vascular anomalies are congenital lesions of abnormal vascular development. Vascular anomalies were classified in 1982 by Mulliken and Glowacki into vascular tumours which grow by cellular heperplasia and vascular malformation, which represent a localised defect in vascular morphogenesis . Hemangioma are vascular tumours with infantile hemangioma being the most common tumours in infancy.

Infantile hemangioma arises from haematopoitic progenitor cells in the appropriate milieu of genetic alterations and cytokines. Abnormal levels of matrix metathoproteinase(MMP) and Proangiogenic factors { Vascular endothelial growth factor [ VEGF ] , basic fibroblastic growth factor [ b-FGF ] , and transforming growth factor beta 1 [ TGF-B 1 ] } play a role in hemangioma pathogenesis . Infantile hemangiomas present shortly after birth as well demarkated , flat and erythematous red patches . They show three distinct developmental phases : proliferation , quiescence & involution .

Earlier nomenclature referred to these manifestation as strawberry, capillary hemangioma, cavernous hemangioma and capillary cavernous hemangioma.

**Disclaimer**

I declare that I did not have any financial support or obligation, explicit or implied to anyone.

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