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## CASE STUDY

### RARE CASE OF CAVERNOUS HEMANGIOMA OF ABDOMINAL WALL

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#### ABSTRACT

Hemangioma may occur anywhere in the body though it is more common in the skin and subcutaneous tissues. It consists of multiple dilated venous channels. It is a spongy swelling and is usually present since birth. It does not show any tendency to involution. On the contrary it may become larger and more troublesome as the time goes on. The Subcutaneous cavernous Hemangioma are very rare benign tumors making up less than 1% of all haemangiomas (Goldberg *et al.*, 2004). A case of eleven years old boy presented with swelling in the infraumbilical region of five years duration with pain for the past one month. On examination a non compressible, tender, warm swelling with out any cough impulse in the subcutaneous region. On Doppler study of a swelling showed thrombosed infra umbilical hemangioma. Then the patient underwent excision biopsy with uneventful post operative day. The histopathological report came as cavernous Hemangioma which is the rarest entity. The post operative period was uneventful and discharged on fourth post operative period. It is being presented for its rarity.

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#### INTRODUCTION

Abdominal wall cavernous haemangioma is a rare vascular tumor and accounts for less than 1% of all haemangiomas (Goldberg *et al.*, 2004 and Wild Raab *et al.*, 2000). It commonly involves the extremity skin and subcutaneous tissues, while there is so far no abdominal wall subcutaneous cavernous haemangioma are reported in English literature (Goldberg *et al.*, 2004). Despite of its rarity these hemangiomas are of clinical interest because of their varied clinical presentations and ability to mimic aggressive tumours.

#### Case Report

A 11 year old boy presented with complaints of a swelling in the infraumbilical region of 5 years duration with pain of 1 month duration. There was no history of trauma or injury over the area. There was no history of surgery in the past or no comorbid illness. On local examination a spherical shaped, 3x3 cms sized swelling in the infraumbilical region of anterior abdominal wall (Fig. 1.1). On palpation in addition to the above finding swelling was warm, tender, non compressible with bluish discoloration with surrounding structures were normal. The blood investigations were within normal limits. On Ultrasonogram of abdomen and pelvis with Doppler study revealed subcutaneous hemangioma with thrombosis.

Hence under local anaesthesia and aseptic precautions, supine position through skin crease incision excision done (Fig. 1.2) & (Fig. 1.3). The specimen sent for Histopathological examination which later revealed as cavernous Hemangioma. The postoperative days are uneventful and on regular follow up.

#### DISCUSSION

Vascular malformations are benign and rare tumors which generally present during the early years of life (Goldberg *et al.*, 2004). They are of interest due to their ability to mimic malignant tumors and varied presentations. It usually is a slow growing mass that may or may not be painful (Sunil *et al.*, 2004). The subcutaneous cavernous haemangioma is a rare entity accounting for less than 1% of all haemangiomas (Goldberg *et al.*, 2004 and Wild and Raab *et al.*, 2000). It consists of multiple dilated venous channels. It is a spongy swelling and is usually present since birth. It does not show any tendency to involution. On the contrary it may become larger and more troublesome as the time goes on. These are always raised from the surface and are localized swellings, spongy in consistency. These are bluish in colour as the content is venous blood. These are non-pulsatile. If pulsatile, communication with arterial system (arteriovenous fistula) should be suspected. Compressibility can be seen. Continued pressure and squeezing will drive the blood out of the lesion and the swelling crumbles (Nack *et al.*, 1990).

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Fig 1.1. The infra umbilical bluish swelling



Fig.1.2. Intraoperative image of bluish lesion (venous Hemangioma)



Fig. 1.3. The post operative image of the wound

As soon as the pressure is removed swelling reappears with refilling. Compressibility can be seen. Continued pressure and

squeezing will drive the blood out of the lesion and the swelling reappears with refilling. Common sites are: (i) face, cheek, ears (ii) in the mucous membrane of lips, mouth and tongue, (iii) In the organs like liver, kidney and brain (Cavernous angioma may be associated with a lipoma (naevolipoma). In some cases arteriovenous communications (Valanzano *et al.*, 1989) arteriovenous fistula) may be present. The skin overlying the angioma may be atrophic and may cause severe haemorrhage from trauma. If organisms gain entry into this angioma, they grow rapidly and may produce septicaemia (Cohen *et al.*, 1983). Sometimes calcification may occur in the form of calcified nodules (phleboliths) in this angioma. Very rarely cavernous haemangioma may turn malignant to produce haemangiosarcoma. Conservative treatment is more often required in the form of Injection of sclerosing agent into the lesion. In this respect 3% sodium morrhuate is quite effective otherwise boiling water or hypertonic saline may be tried (Al Haider *et al.*, 2000). The injection is given once a week for a few times upto 6 weeks if necessary. Cautery treatment may be applied to the haemangioma. A needle is pushed into the haemangioma and its end is touched with a diathermy node. Surgery is a better treatment if the swelling is small and localized. The feeding vessels are first ligated and the whole lesion is excised. Diathermy may be used to control haemorrhage. Such excision may be made easier with preliminary conservative treatment. If there is a feeding artery, which is revealed by arteriography therapeutic embolisation is quite successful (Ariji and Kimura *et al.*, 2001). Application of laser has been claimed to be successful in this condition.

### Conclusion

Abdominal wall cavernous haemangioma is a very rare type of vascular tumor probably due to anatomical factors of the supplying vessels. It needs a high index of suspicion, to diagnose pre-operatively. Doppler sonography can be used to delineate the feeding vessels and surgical excision of the mass remains the best modality of treatment. We searched in the literature and pubmed, other by using google so far no case being published... this may be the first case presented in the literature.

### Footnotes

Source of Support: Nil

Conflict of Interest: Nil

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