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Outcome of Treatment of Capillary Haemangioma with Intralesional Triamcinolole Acetonide Injection

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ABSTRACT

Capillary hemangioma (infantile hemangioma, juvenile hemangioma, or strawberry nevus of infancy) is one of the most common benign orbital tumors of childhood affecting up to 5% of infants under the age of 1 year. It can be superficial, presenting as a red, raised lesion, it can be deep, presenting as a dark blue lesion that may extend into the orbit or may present both of the above components. Capillary hemangiomas involving the eyelids may induce astigmatic anisometropic and amblyopia causing severe vision loss if left untreated. However the present study has conducted to explore results of intralesional Triamcinolone Acetonide injection for the treatment of capillary haemangioma. The study was conducted at Chittagong city in Bangladesh. The study was case study type. For this reason three patients were selected. All of these three babies came to our department with the same complaints that their parents noticed superficial cutaneous lesions, appearing dark blue on purple though the overlying skin around the eyelids till birth. The parents also noticed the lesions are enlarging and changing colour to deep blue during crying and straining. But both pulstein and bruit are absent. All of these consulted with Paediatric surgeons and paediatricians. Oral tablet Propranolol was given. The patients were treated with intralesional Triamcinolone Acetonide Injection. Dose was 2ml total of 40mg/ml at several sites of the lesion. From the result it was noticed regression starts within 3 weeks. The 2nd & 3rd dose were repeated every after One month and took photographs to compare with the previous Prognosis. As the injections were given superficially, no skin depigmentation was seen. After diagnosis, observations and treatment all the three patients were cured.

Key words: *Capillary haemangioma, Outcome, Treatment, Intralesional Triamcinolole Acetonide injection*

INTRODUCTIONS

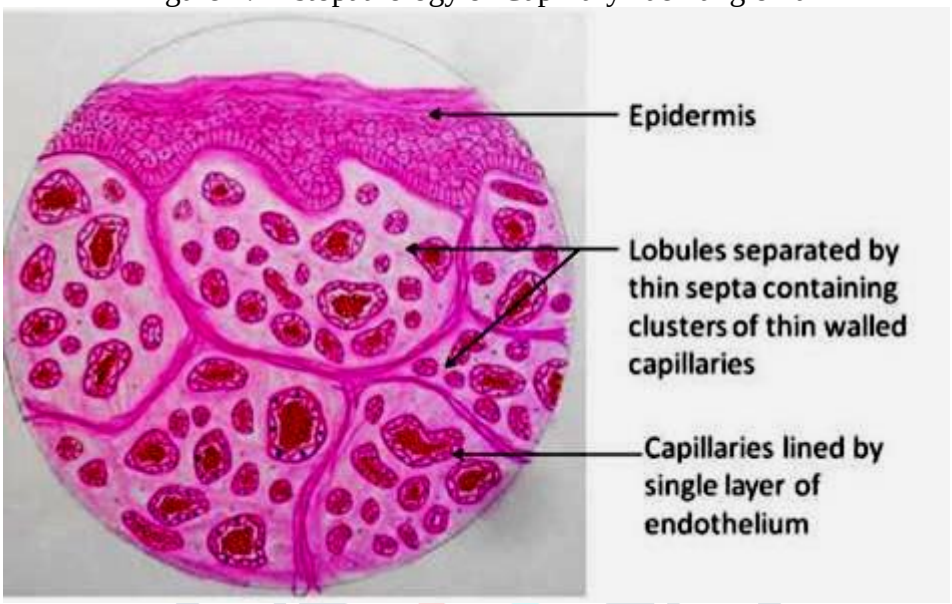
Capillary haemangioma also called strawberry naevus. One of the most common tumours of infancy. It presents shortly after birth as a unilateral, raised, bright red lesions usually in the upper eyelids. These lesions blanches on pressure and enlarge on crying and straining. May be bilateral may involve skins of face and other parts of body. They are benign endothelial cell neoplasms that typically are absent at birth and characteristically have rapid growth in infancy with spontaneous involution later in life. This is in contrast to another known group of childhood vascular anomalies, vascular malformations. Vascular malformations, such as lymphangiomas and arteriovenous malformations are present at birth and are characterized by very slow growth with persistence into adult life. The diagnosis is made clinically, however in extensive cases imaging helps delineate the extent of orbital involvement. The natural course of the capillary hemangioma is initial enlargement in the first year of life followed by spontaneous regression in the following years. Therefore, treatment is only initiated for lesions threatening vision (from amblyopia, exposure keratopathy, optic neuropathy). The current first-line treatment is beta-blockers, systemically and topically. Other choices of therapy include corticosteroids, both oral and injected, surgical excision, and possibly embolization. Rarely, capillary hemangiomas might be associated with systemic hemangiomas or with other conditions such as PHACES syndrome.

Haemangiomas are caused by blood vessels that doesn't form properly.

Several theories are ➡
i) Estrogen signalling may be an important factors in the Proliferation of haemangioma in 2007. They suggested that hypoxia of loealized soft tissues combined with increased estrogen levels after birth may stimulate the formation of haemangioma.

ii) The placenta emboliges to the foetal dermis with the same paint during gestation which causes a haemangioma to occur.

Figure 1: Histopathology of Capillary haemangioma



Histopathology shows proliferations of varying sized vascular channels in the dermis and subcutaneous tissues.

OBJECTIVE OF THE STUDY
The Objective of the study is as follows:
1. To explore results of intralesional Triamcinolone Acetonide injection for the treatment of capillary haemangioma.

METHODOLOGY OF THE STUDY
The study was conducted at Chittagong city in Bangladesh. The study was case study type. For this reason three patients were selected. All of these three babies came to our department with the same complaints that their parents noticed superficial cutaneous lesions, appearing dark blue on purple though the overlying skin around the eyelids till birth. The parents also noticed the lesions are enlarging and changing colour to deep blue during crying and straining. But both pulstein and bruit are absent. All of these consulted with Paediatric surgeons and paediatricians. Oral tablet Propranolol was given. The patients were treated with intralesional Triamcinolone Acetonide Injection. Dose was 2ml total of 40mg/ml at several sites of the lesion. From the result it was noticed regression starts within 3 weeks. The 2nd & 3rd dose were repeated every after One month and took photographs to compare with the previous Prognosis.

RESULTS AND DISCUSSION

Case Description:

Case 1
Name of patient: Zumairah Rahman
D/o - Tawhidur Rahman
Age: 01 (one) Month
Sex: Female
Mode of delivery: Lscs.

Figure 2: A patient (Zumairah Rahman) with Capillary haemangioma

Case 2
Name of patient: Meem
D/o - S. Ali
Age: 01 (one) Month
Sex: Female
Mode of delivery: Lscs.

Figure 3: A patient (Meem) with Capillary haemangioma

Case 3
Name of patient: **Deen**
S/o - Delwar Hossain
Age: 1½ (one and half) Month
Sex: Male
Mode of delivery: Lscs.

Figure 4: A patient (Deen) with Capillary haemangioma

All of these three babies came to our department with the same complaints that their parents noticed superficial cutaneous lesions, appearing dark blue on purple though the overlying skin around the eyelids till birth. The parents also noticed the lesions are enlarging and changing colour to deep blue during crying and straining. But both pulstein and bruit are absent.

Table 1: On ocular examination

Ocular examination	Limit
Ant. Segment	Normal limit
Post. segment	Normal limit
Eye movement	Normal limit

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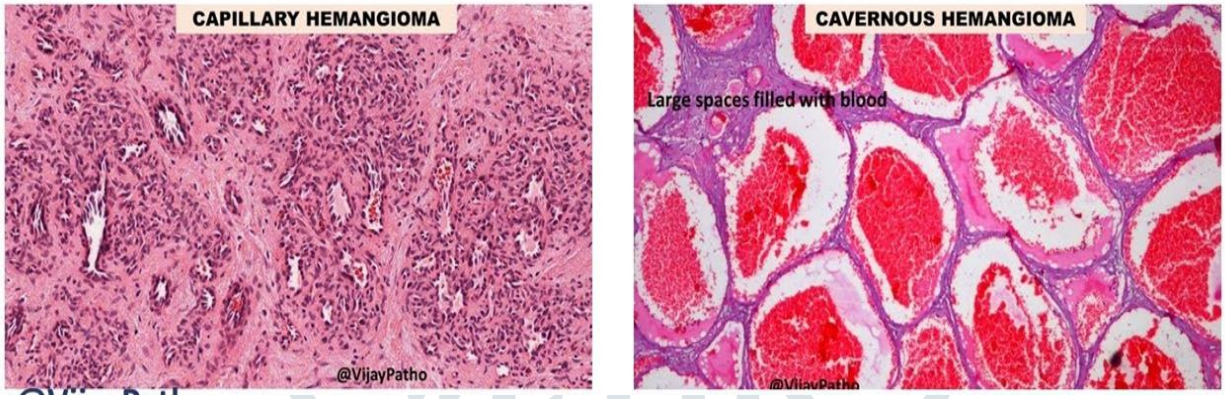
DISCUSSION

Haemangioma usually presents at the first few months of life and is the most common benign tumour in children. Mostly they are appeared on the skin and mucous membrane of the head and neck region.
They are classified into-
-Capillary (Superficial)
-Deep (Cavernous) and
-Capillary.cavernous (Mixed)
=Based on the depth in the dermis.

Figure 5: Practical pathology of hemangioma



Ulceration, bleeding, seasring and infection are the complications of haemangioma also dysfunction in
-Vision
-Respiration
-Hearing and
-Feeding.
The causes of haemangioma has not yet been established but the growths are more common among the female babies born prematurely and while infants.

CONCLUSION

Various therapeutic options are for the treatment of haemangioma including
i) Observation for spontaneous remission.
ii) Using intralesional and systemic corticosteroids.
iii) Cryosurgery.
iv) Interferon.
v) Radiation.
vi) laser therapy. (CO_2 laser PDL YAG Laser)
After diagnosis, observations and treatment all the three patients were cured.

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