



ISSN: 0975-833X

RESEARCH ARTICLE

INFANTILE HEMANGIOMA – A CASE REPORT

*Dr. Sanjay Kumar Sinha Bds, Dr. Shailesh Chandra Gupta Bds and Dr. Brajesh Kumar Bds

Govt Dental College and Hospital, Patna

ARTICLE INFO

Article History:

Received 18th December, 2014
Received in revised form
18th January, 2015
Accepted 23rd February, 2015
Published online 17th March, 2015

Key words:

Infantile hemangioma,
Vascular tumor,
Steroids,
Pulsed dye lasers

ABSTRACT

Infantile hemangiomas are the most common benign tumors in infancy affecting 5-10% of the population and are largely composed of densely packed over proliferating capillaries with high cellular density and the absence of open lumen. These lesions are 3 times more prevalent in females than males. During first year of life these tumors are strongly proliferative in nature. These lesions subsequently stabilize and further undergo spontaneous slow involution and fully regressed by 5-10 years. We are, here now presenting a case of 7 years old female child with vascular swelling on left side of upper lip. There was no birth mark at the time of her birth but later on swelling in upper lip appeared which progressively increased in size, with a tendency to easy bleed, followed by regression, suggesting a case of infantile hemangioma.

Copyright © 2015 Dr. Sanjay Kumar Sinha Bds et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Hemangiomas are the most common benign vascular tumor in infancy. The prevalence has been estimated to be 2-3 percent in neonates, 10 percent under one year of age and upto 22 percent to 30 percent in preterm babies weighing less than 1000 grams. Hemangiomas can be found in all regions of the body but most commonly found in head and neck around 60 percent followed by the trunk [25 percent] and then the extremities 15 percent. They are more frequent in girls than boys [3:1 to 5:1]. Etiology of hemangioma remains unknown.

Case History

A 7 year old female patient reported to our clinic with the chief complaint of frequent bleeding from the swelling present on her lips even on slight provocation. On examination, extraorally there was dispersed swelling (Fig. 3) present on left side of upper lip extending from philtrum to the side of the nose. Skin over the swelling was not looking normal and had lost its texture. Colour of the swelling was reddish brown with drooping of lips from middle to left corner of the mouth also seen. On palpation, swelling was soft in consistency and it was not attached to underlying hard tissues structures. On intraoral examination, swelling (Fig. 4) extends upto the mucobuccal fold from middle to the corner of the mouth.

The mucosa over the swelling was darker than the normal mucosa with multiple haemorrhagic points which tends to bruise frequently. Dentition was normal except presence of multiple caries. No other significant finding was evident. On further enquiry with her parents, they informed there was no such swelling noticed at the time of birth (Fig. 1) but as time progressed swelling appeared and increased over period of time, they also informed there was massive bleeding even with minor cuts. When she was one year old (Fig. 2) swelling was more prominent and red in colour extending from upper lip to margin of lower eyelid. Their parents were very careful to avoid any injury of possible bleeding episodes. They informed bleeding occurrence was higher from inner side of lips which was sometimes difficult to control. Their parents further informed, that swelling started to reduce after 2 years of age. At the age of 7 when patient reported to us there was remarkable reduction in swelling with less bleeding episodes.



Fig. 1. At age of 20 days



Fig. 2. At the age of 1 year



Fig. 3. Extraoral view at 7 years



Fig. 4. Intraoral view

DISCUSSION

The term hemangioma was originally used to describe any vascular tumor like structure, whether it was present at around birth or appeared later in life. It can be broadly classified into two groups. A group of self-involuting tumor, growing lesions that eventually disappear and another group of malformations, enlarged or abnormal vessels present at birth and essentially permanent. Some of the hemangiomas are formed during gestation and so called congenital hemangioma. The most common is infantile hemangioma, which appears in the first week of the life. Infantile hemangioma is often initially misdiagnosed as 'scratch' or 'bruise' but correct diagnosis becomes obvious with further growth. Infantile hemangiomas

are characterized by endothelial cell proliferations and its natural course can be divided into ..

1. Rapid proliferative phase [0 to 1 year]
2. Involuting phase [1 to 5 years] and
3. Involuting phase [5 to 10 years]

The vast majority of hemangiomas are not associated with complications. Hemangiomas may breakdown on the surface causing ulcerations. If ulceration is deep, significant bleeding may occur. Since connected to circulatory system. Ulceration on the deeper area can be painful and problematic. Most hemangiomas disappear without treatment leaving minimal or no visible marks. It might take many years to disappear. Large hemangiomas can leave visible skin changes, secondary to severe stretching of the skin or damage to surface texture.

Treatment

These hemangiomas are usually not life threatening or function impairing, but lack of self-confidence and distress. Careful observation should be carried out. A few stubborn problematic hemangiomas may result in serious disfigurement and dysfunctions, even become life threatening. Various psychological problems will emerge due to disfigurement, such as negative self-image evaluation. The treatment of infantile hemangiomas depends on following factors, type of hemangioma, stage of the lesion, location and extent, number and distribution, associated systemic involvement, presence or absence of ulceration. Treatment of infantile hemangioma includes drugs, surgery and other newer modalities. Systemic steroids and propranolol are two main drugs in the management of IH. Other systemic drugs, like interferon alpha, vincristin and cyclophosphamide, which are reserved for life-threatening hemangioma, unresponsive to conventional therapy. Topical therapy includes timolol, propranolol, imiquimod, and topical steroids. Pulsed dye laser has been used successfully for ulcerated lesions, which reduces pain and promotes healing.

Conclusion

Infantile hemangiomas are the most common benign vascular tumors, they cause parental discomfort and anxiety and need to be carefully assessed for treatment point of view. Most infantile hemangiomas are uncomplicated and can be managed by active non-intervention alone. Systemic steroids have been considered a therapeutic protocol for complicated hemangiomas for several decades. Safety of propranolol therapy in treating infantile hemangioma is already established.

REFERENCES

- Aldave, AJ., Shields, CL. and Shields, JA. 1999. Surgical excision of selected amblyogenic periorbital capillary hemangiomas. *Ophthalm Surg Lasers.*, 30:754-757.
- Brandling-Bennett, HA., Metry, DW., Baselga, E. et al. 2008. Infantile hemangiomas with unusually prolonged growth phase: A case series. *Arch Dermatol.*, 144:1632-1637.

- Chamlin, SL., Haggstrom, AN., Drolet, BA. *et al.* 2007. Multicenter prospective study of ulcerated hemangiomas. *J Pediatr.*, 151:684-689:689.e1.
- Chang, LC., Haggstrom, AN., Drolet, BA. *et al.* 2008. Growth characteristics of infantile hemangiomas: Implications for management. *Pediatrics*, 122: 360-367.
- Corella, F., Garcia-Navarro, X., Ribe, A. *et al.* 2008. Abortive or minimal-growth hemangiomas: Immunohistochemical evidence that they represent true infantile hemangiomas. *J Am Acad Dermatol.*, 58:685-690.
- Cruz, OA., Zarnegar, SR. and Myers, SE. 1995. Treatment of periocular capillary hemangioma with topical clobetasol propionate. *Ophthalmology*, 102: 2012-2015.
- Girard, C., Bigorre, M., Guillot, B. *et al.* 2006. PELVIS syndrome. *Arch Dermatol.*, 142:884-888.
- Grantzow, R., Schmittenebecher, P., Cremer, H. *et al.* 2008. Hemangiomas in infancy and childhood. S 2k guideline of the German Society of Dermatology with the working group pediatric dermatology together with the German Society for Pediatric Surgery and the German Society for Pediatric Medicine. *J Dtsch Dermatol Ges*, 6:324-329, 2008.
- Haggstrom, AN., Drolet, BA., Baselga, E. *et al.* 2006. Prospective study of infantile hemangiomas: Clinical characteristics predicting complications and treatment. *Pediatrics*, 118:882-887.
- Kilcline, C. and Frieden, IJ. 2008. Infantile hemangiomas: How common are they? A systematic review of the medical literature. *Pediatr Dermatol.*, 25:168-173.
- Lode, H., Deeg, K. and Krauss, J. 2008. Spinal sonography in infants with cutaneous birth markers in the lumbo-sacral region—An important sign of occult spinal dysraphism and tethered cord. *Ultraschall Med.*, 29:281-288.
- Mulliken, JB., Marler, JJ., Burrows, PE. *et al.* 2007. Reticular infantile hemangioma of the limb can be associated with ventral-caudal anomalies, refractory ulceration, and cardiac overload. *Pediatr Dermatol.*, 24:356-362.
- Schachner, L. and Hansen, R. 2003. *Pediatric Dermatology*. New York, Elsevier.
- Shian, WJ., Chi, CS. and Wong, TT. 1994. Lipomyelomeningocele: A 9-year review. *Zhonghua Min Guo Xiao Er Ke Yi Xue Hui Za Zhi* 35:57-62.
- Sterker, I. and Gräfe, G. 2004. Periocular hemangiomas in childhood—Functional and esthetic results. *Strabismus* 12:103-110.
- Stockman, A., Boralevi, F., Taïeb, A. *et al.* 2007. SACRAL syndrome: Spinal dysraphism, anogenital, cutaneous, renal and urologic anomalies, associated with an angioma of lumbosacral localization. *Dermatol Basel.*, 214:40-45.
