Editorial

Infantile hemangioma: Treatment guidelines

Gedam DS[1], Patel U[2]

Dr D Sharad Gedam, Professor of Pediatrics, [2]Dr Umesh Patel, Associate professor, both are member of editorial board and affiliated with L N Medical college, Bhopal, MP, India.

Address for correspondence: Dr D Sharad Gedam, Email: editor.ijmrr@gmail.com

.....

Abstract

Infantile hemangioma is most common benign tumour of infancy. Propranolol has become treatment of choice once approved by FDA recently. We are presenting a brief discussion regarding available options for treatment.

Key words: Infantile hemangioma, Propranolol, benign tumour of Infancy

.....

Infantile hemangiomas are most common tumour of Infancy. They are benign neoplasm and medically not significant. Mostly they are not life threatening. Most are characterized by rapid proliferation up to 4-6 months followed by spontaneous involution. FDA has finally approved propranolol for treatment of infantile hemangioma [1]. Head and neck are involved in 60 % of cases followed by chest and extremities.

Most hemangiomas characterized by rapid proliferation from birth to 4 weeks followed by slow proliferation up to 6 months [2-4]. In half of the patients there is complete involution by the age of 5 years followed by 75 % up to 8 years of age. Various treatment options are available. In this editorial we have a brief discussion about treatment modalities.

Vast majority of hemangioma do not need any surgical or medical treatment. Treatment options are broadly classified in three groups.

1. Laser therapy

2. Pharmacological treatment

3. Surgical treatment

Laser Therapy: Flashlamp-pumped pulsed-dye laser is most commonly used. It is useful for lesion which are superficial and telengietasias. They can penetrate only up to 1.2 mm and useful only in thin port wine stain [5]. Laser therapy is not having any effect on hemangioma which is raised over skin. There role in proliferating hemangioma is controversial. It is associated with disfigurement an ulceration of the lesion [6].

Pharmacological treatment

1. Systemic steroids: They are first line therapy for life threatening hemangiomas. We need to explain parents that steroids do not decrease size of hemangiomas but they can put a break on further growth. It is only useful in proliferative phase which last up to 4 months in most of infants. There role beyond 6 months is controversial [5]. Initial dose is 2-3 mg/kg/day and tapered once there is response.

2. Interferon: They were considering 2nd line drugs after steroids for life threatening haemangioma. There use is decreased progressively because of neurotoxicity.

3. Intralesional and topical steroids: intralesional steroids are most useful for focal periocular hemangiomas which are small. Topical steroids are only useful for minimally raised small hemangiomas of face.

Surgical treatment

This is definitive treatment option for most hemangiomas after pharmacological treatment once involution occurs. Surgical option depends upon size, location and individually decided.

Propranolol Therapy

It is consider first line therapy by most of authors. Initial dose is 2-3 mg/kg/ day. Response rate varies from 80-96 % in various studies [7-9]. Few side effects have been noticed that include diarrhoea, bradycardia, ulceration etc.

Singh N et al in his study found good response in 96 % cases. No side effects were observed [10]. In India there are very few studies available. Multicentre study with large number patients should be planned in Indian sub continent.

References

1. Brooks M. FDA OKs Propranolol Hydrochloride for Infantile Hemangioma. Medscape Medical News. Available at http://www.medscape.com/viewarticle/822115. Accessed December 24, 2014

2. Lister WA. The natural history of strawberry naevi. *Lancet*. 1938;1:1429.

3. Bowers RE, Graham EA, Tomlinson KM. The natural history of the strawberry nevus. *Arch Dermatol*. 1960;82:667.

4. Jacobs AH. Strawberry hemangiomas; the natural history of the untreated lesion. *Calif Med*. Jan 1957;86(1):8-10

5. Denise W. Metry . Ten Lessons Learned from a Hemangioma Clinic. Semin Plast Surg. 2006 Aug; 20(3): 157–162. doi: 10.1055/s-2006-949117

6. *Batta K, Goodyear HM, Moss C, Williams HC, Hiller L, Waters R.* Randomised controlled study of early pulsed dye laser treatment of uncomplicated childhood haemangiomas: results of a 1-year analysis. *Lancet. 2002 Aug 17; 360(9332):521-7.*

7. Solman L, Murabit A, Gnarra M, Harper JI, Syed SB, Glover M. Propranolol for infantile haemangiomas: single centre experience of 250 cases and proposed therapeutic protocol. Arch Dis Child. 2014 Dec;99(12):1132-6. doi: 10.1136/archdischild-2014-306514. Epub 2014 Aug 14.

8. Chu DH, Castelo-Soccio L, Wan J, Gelfand JM, Shaddy RE, Shah KN, Perman MJ, Treat JR, Yan AC. Retrospective analysis of beta-blocker instituted for treatment of hemangiomas (RABBIT study). Clin Pediatr (Phila). 2014 Oct;53(11):1084-90. doi: 10.1177/0009922814535660. Epub 2014 May 21.

9. Zheng JW[1], Zhang L, Zhou Q, Mai HM, Wang YA, Fan XD, Qin ZP, Wang XK, Zhao YF. A practical guide to treatment of infantile hemangiomas of the head and neck.

Int J Clin Exp Med. 2013 Oct 25;6(10):851-60. eCollection 2013.

10. Singh N, Rohit D, Singh S, Thakur O, Verma RS. Propranolol for management of Infantile Haemangioma: A Single Centre Experience. *Int J Med Res Rev* 2015;3(1):40-44.

.....

How to cite this article?

Gedam DS, Patel U. Infantile hemangioma: Treatment guidelines. *Int J Med Res Rev* 2015;3(1):1-2. doi: 10.17511/ijmrr.2015.i1.028

……..