
Moderate size infantile hemangioma of the left side of the face, conservative or surgical treatment?: Case report and review of literature

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Abstract

The aim of presenting this case is to show the advanced presentation of the infantile haemangioma (IH), the choices of treatment at poor resources setting, the current management plans.

The infantile haemangioma (IH) is a benign tumour of the infancy. Although the majority of cases treated conservatively, the recent advances in medicine has made the critical outcome of the difficult and complex lesion into a more predictable one by application of the modern therapy.

However the level of care offered to this group of patient is different from country to country and sadly the patients with the advanced or complex problem in the developing countries will have the worse outcome scenario. In developing countries, the conservative measure may be the only option while in developed nations other methods of treatment including surgery would be available.

But in any case of locally advanced lesion, more radical solution should be considered.

CASE REPORT

A 10 month girl infant brought by her parents to the outpatient clinic at Alburaihy hospital, Taiz, Yemen September 2004. The family described a history of progressive enlargement of a tumour in the left side of face, of otherwise healthy child. The tumour had covered the medio-inferior aspect of the left orbit recently. There were

occasional ulcerations & bleeding but no associated congenital skin problem.

On examination: a compressible swelling of 7x5 cm occupying the left side of the face, partly involving the nose, mouth, partly covering the left orbit, causing deformation of the nose, mouth and left side of the face. There was red margin surrounding a central necrotic patch.

Figure 1

Figure 1: Moderate size infantile hemangioma



INVESTIGATIONS

Blood: full blood count and urea & electrolytes, coagulation profile was normal.

Skull X-Ray, computerized tomography (CT) of skull ruled out any intracranial lesion and had confirmed the facial haemangioma, Biopsy was done, and the same diagnosis was reported.

MANAGEMENT & OUTCOME

The available options in Yemen were to wait for a possible natural response and the use of steroid or to advise a radical excision for such a complex lesion. The two options were explained to the parents and they were fully informed. They preferred conservative treatment.

She was referred to the ophthalmologist for checking and follow-up of the vision. In the report of the vision status, there was difficulty in assessing the vision, however as the orbit is not completely covered, and it has been just recently partially covered, so there was a space of time to wait.

During a period of 17 months of follow up a substantial reduction in the size of the lesion was noticed. However it did not resolve completely. The left eye is now less affected by tumour. In view of this partial but definite response a resolution was anticipated. The surgical option, of course, is still there in case of local complications, or if the lesion

failed to resolve completely with an aesthetic course.

DISCUSSION

Haemangiomas are the most common benign tumor of infancy that can be classified as simple and complex entities with female predilection.

The natural course of immature haemangiomas in infants is well known. A rapid phase of growth from 6 to 8 months is followed by a period of stability then regression. The diagnosis is usually easy and certain investigations such as CT should be done to rule out associated hidden lesions.

Since most of these immature hemangiomas remain asymptomatic and resolve spontaneously, the conservative management is generally the rule (1). Nevertheless the list of treatment includes surgical and non-surgical methods. Not all vascular malformations can be successfully treated by surgery; in certain cases watchful waiting seems justified but not in cases of severe problems, giant growth, and local complications (2). Systemic steroid therapy may be indicated in IH and the reported success is documented and highly recommended (3) by authors and even good or partial response to treatment with ultrapotent topical corticosteroids was reported in 74% of IH (4) while the intralesional administration of triamcinolone devoid of systemic side effects is considered to be an effective initial modality for rapidly growing haemangioma (5).

Some authors, however, advised an intervention if the rapidly proliferating haemangioma is completely obscuring the vision and causing deprivation amblyopia (6). For haemangioma which is located at median part of the face early surgery can be proposed in order to avoid definitive deformation or growth impairment of adjacent structures. It should be performed before school age and before occurrence of psychological difficulties (7) while periorbital hemangiomas must be managed by individual and interdisciplinary diagnostic and therapeutic approaches. (8).

To achieve complete resection, prevention of recurrence and decreasing complications, surgeons adopted different approaches and precautions. One of these approaches is circular excision and purse string (9).

Laser therapy advocated by some authors for early flat haemangioma even in the first days or weeks of life, to prevent enlargement, promote involution, or eliminate these vascular lesions (10).

CONCLUSION

Infantile haemangioma should be observed first, the other main therapeutic options are steroid and the surgery. With the advances in methods of management, the complex and difficult lesion would be amenable to the modern therapeutic measures.

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References

1. Ceisler EJ, Santos L, Blei, F Periocular hemangiomas: what every physician should know.: *Pediatr Dermatol.* 2004 Jan-Feb; 21(1):1-9.
2. Schmelzle R, Vascular and neural malformations, *Mund Kiefer Gesichtschir.* 2000 May; 4 Suppl 1:S76-83.
3. Dourmishev LA, Dourmishev AL. Craniofacial cavernous hemangioma: succesful treatment with methylprednisolone, *Acta Dermatovenerol Alp Panonica Adriat.* 2005 Jun;14(2):49-52 .
4. Garzon MC, Lucky AW, Hawrot A, Frieden IJ1 Ultra potent topical corticosteroid treatment of hemangiomas of infancy.. *J Am Acad Dermatol.* 2005 Feb; 52(2): 281-6.52(2): 130-5.
5. Gangopadhyay AN, Sharma SP, Gopal SC, Gupta DK, PanjawaniK, Sinha JK Local steroid therapy in cutaneous hemangiomas, *Indian Pediatr.* 1996 Jan;33(1):31-3.
6. Gorst CM, Munnoch DA, Hancock K. Combined treatment of a proliferate peri-orbital haemangioma with a tuneable dye laser and intra-lesional steroids to prevent deprivation amblyopia. *J R Coll Surg Edinb.* 2001 Aug; 46(4):234-6.
7. Degardin-Capon N, Martinot-Duquennoy V, Patenotre P, Breviere GM, Piette F, Pellerin P, Early surgical treatment of cutaneous hemangiomas, *Ann Chir Plast Esthet.* 2006 August - October;51(4-5):321-329.
8. Sterker I, Grafe G. Periocular hemangiomas in childhood- functional and esthetic results *Strabismus.* 2004 Jun;12(2):103-10.
9. Mulliken JB, Rogers GF, Marler JJ. Circular excision of hemangioma and purse-string closure: the smallest possible scar *Plast Reconstr Surg.* 2002 Apr 15; 109(5): 1544-54.
10. Poetke M, Philipp C, Berlien HP Treatment of hemangiomas in infancy and childhood with the flash lamp-pumped dye laser: cutaneous versus mixed cutaneous-subcutaneous hemangiomas, *Hautarzt.* 2001 Feb;52(2):120-7.

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