

Problem And Principles Of Surgical Treatment Of Haemangiomas

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KEY WORDS

Early complete Excisions.

ABSTRACT

Surgical excision of haemangiomas in selected cases is the quickest and surest method of cure. However, this treatment modality has never been very popular because of problems of bleedings, recurrence and need for reconstruction later. A study of 25 cases of various types of haemangiomas treated surgically is presented.

INTRODUCTION

Diagnosis of haemangiomas is simple but its management difficult. Concepts regarding selection of treatment - modality and timing of active interference with haemangioma are changing. 'Early' surgical treatment whenever possible is a relatively new treatment approach. (Jose K Rosales 1983, J Bandet D River (1987). We agree with the views of Andra A(1979) that cavernous haemangiomas should be treated by 'complete excision' during early infancy. Surgical excision has been described to be the treatment modality of choice in cases of haemangiomas of bone (Bridger M.W. 1976), muscle (Sutherland AD 1975), nerve (Prosser AJ, Burker F.D. 1987), conjunctiva (Rao MR et. al 1989), tongue (Galletti 1988) etc.

MATERIAL AND METHOD

In the Department of Burns & Plastic Surgery, Kasturba Medical College, Manipal, 25 cases of haemangiomas at different sites were surgically treated during the period from January 1985 to July 1992.

Photographs (1-8)

OBSERVATIONS

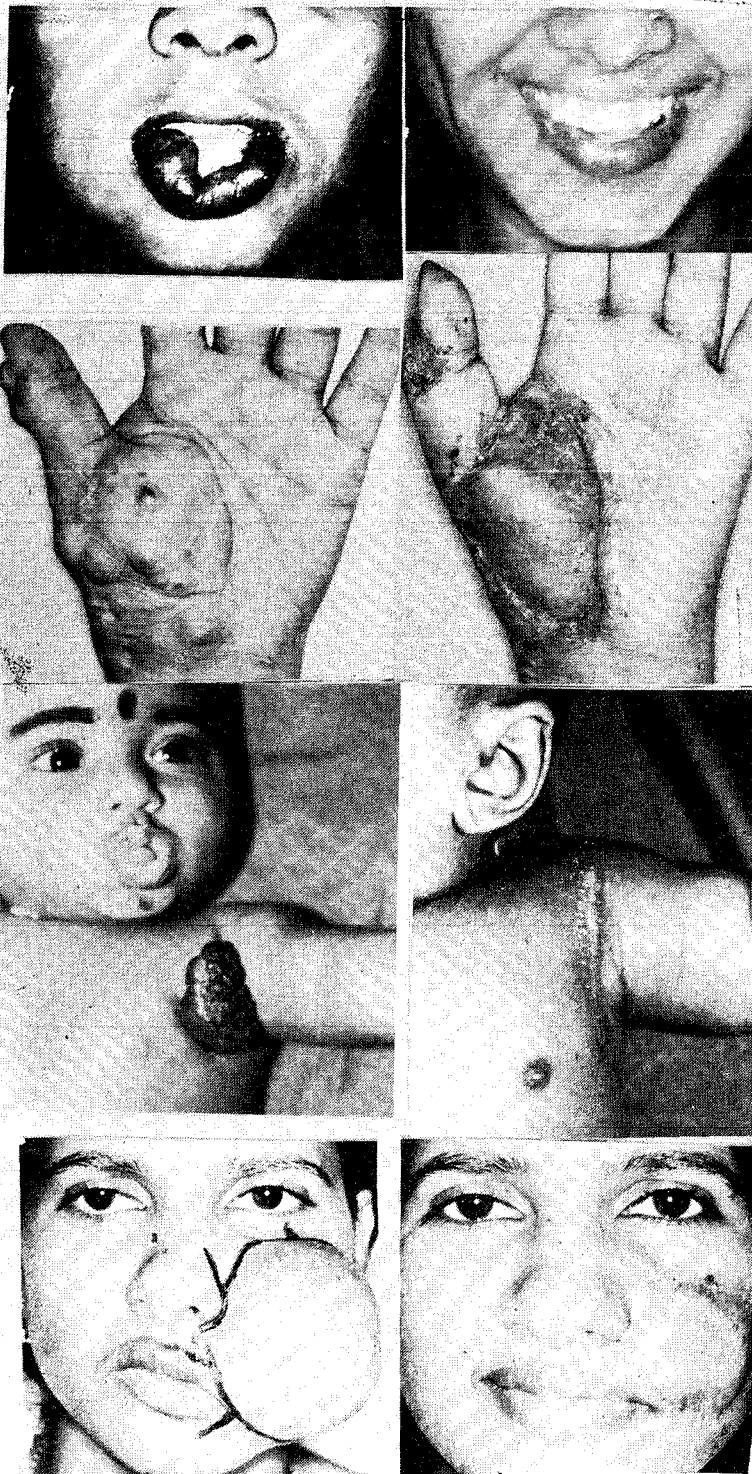
7 (28%) patients were less than 10 years of age, of which 4 were below one year. Intralesional injections of boiling water was used as a method of minimising bleeding during surgery in 6 patients (24%) effectively. One patient underwent embolotherapy of left facial artery using gel-foam before surgery. Five (20%) patients underwent more than one sitting of surgery, either for excisional surgery or for reconstruction.

DISCUSSION :

In terms of the final results, surgical excision of haemangiomas is perhaps the best method of guaranteed cure and to minimise compromise with function and cosmetic results. However, it cannot be denied that surgical excision involves problems namely (1) Control of bleeding (2) recurrence of lesion & (3) reconstruction of defect.

1. The measures to control bleeding can be pre-operative, per-operative or post-operative. The usual 'pre-operative' measures or minimising bleeding are marking the feeder vessels with ultrasound doppler, and ligating by use of Esmarch's bandage and tourniquet for lesions over limbs. Selective angiography and selective embolisation are of incredible use in large haemangiomas, with arterio-venous fistulae. In cases of cavernous haemangiomas, boiling water injection about two weeks prior to surgery, results in temporary regression and thus minimises bleeding during surgery.

Few precautions taken during surgical excision of haemangiomas can minimise 'per-operative' bleeding during excision. e.g. identification of 'proper plane' for excision of haemangiomas. Proper plane of haemangioma excision should always be through the normal tissue, close to haemangioma and not through the haemangioma. Secondly as far as possible, excision should be in toto and not in bits. Application of pressure bandage over the operated area suffice in preventing haematoma.



1. Cavernous Haemangioma of Lower Lip.
2. Rt. Cheek and Chin (Pre - Op.)
3. Post. Op After Surgical Excision Following Intralesional Boiling Water Injections
4. Cavernous Haemangioma of Lt. Palm; Thumb and Wrist (Pre. Op.)
5. After Surgical Ectision and split Skin Grafting
6. Cavernous - Capillary Haemanuoma Post - Operative Result.
7. A red Hot Arterial Haemangioma of Lt. Cheek.
8. Post - Operative After Surgical Excision

Second problem of haemangioma surgery is "recurrence". Measures to prevent the problems of recurrence are (1) to avoid surgery during rapid growth eg. in infancy, as was advised by Edgerton (1976), (2) to have a bloodless field during excision as far as possible, so that extension of haemangiomas along the muscles can be identified and if need be sacrificed. (3) to avoid excision through haemangiomatous tissues means excision should be three dimensionally through the normal tissue-plane, closest to the lesion. (4) to sacrifice the overlying skin or mucosa whenever it is involved.

Sacrifice of skin and mucosa may invite additional third problem of 'reconstruction' after haemangioma excision. There are few cases where excision of cavernous haemangioma and direct closure of skin can be done.

Whenever in doubt about complete excision it is best to cover the defect with split skin graft for recurrence prior to flap cover.

REFERENCE :

1. Andra A (The surgical treatment Cavernous haemangioma of the orofacial region (authors translation) - Zahn Mund-Kieferheilkd 1979; 67 (3) : 227 - 34.
2. Bridger M.W. - Haemangioma of the nasal bones - J Laryngol - otol 1976 Feb; 90(2) - 200.
3. Edgerton - The treatment of Haemangiomas : with Special Reference to the Role of Steroid Therapy - Ann. Surg. Max 1976; 183 (5) : 517 - 529.
4. Galletti-C - (Cavernous haemangioma confined to the tongue) Arch - Stomatol - Napoli. 1988, Dec : 29(6) : 1371 - 81.
5. Jose K Rosales : Hypotensive anaesthesia in surgery of haemangioma. symposium on vascular malformations and melanotic lesions : 1983 - 22, 52.
6. Kirchoff - D; et. al., Cavernous angiomas of the skull, Neurochirurgia - Stuttg. 1978 Mar; 21(2) : 53 - 62.
7. Prosser - Aj - Burke - FD: Haemangioma of the median nerve associated with Raynaud's phenomenon, J - Hand - Surg - Br. 1987, Jun : 12(2) : 227 - 8.
8. Rao - MR, Patankar - VL, Reddy - V, Cavernous haemangioma of conjunctiva (a case report) - Indian J - Ophthalmol 1989, Jan. Mar : 37 (1) : 37 - 8.
9. Sutherland - AD - Equinus deformity due to haemangioma of calf muscle - J Bone - Joint Surg. - Br., 1975, Feb : 57 (1) , 104.

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