RESEARCH ARTICLE

NON-SURGICAL MANAGEMENT OF ORAL HEMANGIOMA

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DOI: 10.5455/ijmsph.2013.151020133 **Received Date: 23.09.2013** **Accepted Date: 25.01.2014**

ABSTRACT
Background: Hemangiomas are solitary or sometimes multiple flat or raised reddish blue lesions. These are benign, vascular tumours that can lead to disfigurement or may become life threatening. Oral mucosa and skin are most commonly affected. Many modes of therapy have been advised for hemangiomas, which include cautery, cryotherapy, radiotherapy and sclerosing agents.
Aims & Objective: Present study was undertaken to study the non-surgical management of oral hemangioma.
Material and Methods: A prospective study of all clinically diagnosed cases of oral hemangioma at a tertiary care hospital was carried out. Surface anaesthesia was given by 15% xylocaine spray. 3% sodium tetradecyl sulphate was given as intralesional injection at multiple sites with insulin syringe. 0.1 to 1ml of STS was injected depending upon the size of lesion. Follow up examination of all cases was done.
Results: A total of 15 cases were included in the study, in a period of 5 years. Hemangioma regressed in all cases with relief of symptoms. All patients complaining of bleeding, inflammation and pain were given analgesic and anti-inflammatory drugs. Complete remission was seen in 86.67% of the patients. 13.33% showed partial regression with ulceration and sloughing, which subsided with subsequent treatment.
Conclusion: Various treatment modalities are recognised in the management of oral hemangiomas. Use of 3% sodium tetradecyl sulfate is cheap, very effective and easy treatment modality. However, judicial use of dose, number and site of injections is advised to prevent further complications.
Key-Words: Oral Hemangioma; Sclerosing Agents; Non-Surgical Management

Introduction

Hemangiomas are benign, vascular tumours that can lead to disfigurement or may become life threatening. They are usually classified into capillary, cavernous or mixed hemangiomas. Oral mucosa and skin are most commonly affected followed by bone and muscles within the oral cavity. These appear as flat or raised deep blue in colour over the surface of the mucosa.[1] Most hemangiomas are solitary and asymptomatic, depending upon patients presenting from rural or urban areas and those taking spicy / irritant food. Many modes of therapy have been advised for hemangiomas, which include cautery, cryotherapy, radiotherapy and sclerosing agents. Most these techniques cause unavoidable tissue damage and subsequent fibrosis.[2,3]

Sclerosing agents have high response rate, they are less expensive and easy to obtain. However, various sclerosing agents like ethanol, boiling contrast media, sodium morrhuate, sodium tetradecyl sulphate and bleomycin have been used successfully in management of these lesions. These agents sometimes cause marked tissue irritation and thrombosis with subsequent local inflammation. Intralesional injection of 3% sodium tetradecyl sulfate (STS) has been used since many years for the treatment of varicose veins, haemorrhoids and hemangioma. In this study we evaluate the use of STS as a sclerosing agent for the management of oral hemangioma.[3,4]

Materials and Methods

Present study was done at a tertiary care hospital in western Uttar Pradesh.

Unit of Study: All clinically diagnosed cases of oral hemangioma were included in the study.

Nature of Study: This prospective study included all patients with oral hemangioma. Follow-up cases or those who had undergone treatment anytime earlier were excluded from the study. After taking informed consent, surface anaesthesia was given by 15% xylocaine spray. 3% sodium tetradecyl sulphate was given as intralesional injection at multiple sites, first at the periphery and then into the centre of the lesion with insulin syringe. 0.1 to 1ml of STS was injected depending upon the size of lesion. Compression was given at the site of lesion for stasis when required. Injection was repeated after an interval of 2 weeks. Analgesics and anti-inflammatory drugs were given to patients complaining of pain and inflammation.

Study Period: 5 years (January 2008 – December 2012)

Sample Size: Total no. of cases were 15.

Study Schedule: An elaborate schedule was prepared before undertaking the study. Detailed history and clinical examination was done. A prior consent was taken from Institution's Ethical Committee (IEC).

Analysis: Follow up examination of all cases was done. Data was analysed and correlated.

Results

In our present study, a total of 15 cases were included and subjected to intralesional injections. Hemangioma regressed in all cases with relief of symptoms. All patients complained of bleeding, inflammation and pain, but these subsided after analgesic and anti-inflammatory drugs were given. However, 2 (13.33%) cases showed partial regression of lesion. These patients showed improvement after two weeks of therapy.

Table-1: Site of lesions

Site	No.	%
Tongue	13	86.66
Lip	1	6.67
Palate	1	6.67
Total	15	100

Table-2: Treatment outcome in all cases

Total Cases	Total Regression	Partial Regression
15	13 (86.67%)	2 (13.33%)

Table-3: Presentation in cases with partial regression

Result	No.
Residual mass	1 (6.67%)
Ulceration & sloughing	1 (6.67%)

Discussion

Hemangiomas are solitary or sometimes multiple, flat or raised reddish blue lesions. 10-20% of these lesions need active intervention bescause of their tendency to bleed and ulcerate. Oral hemangiomas are a rare entity and need careful follow up and judicial use of management protocol so as to evade impairment of vital functions.[5,6] Various modalities of treatment have been in use for these lesions. Surgical excision is gold standard, but functional impairment like difficulty in swallowing has been of great worry. Excessive bleeding is sometimes an unavoidable consequence along with recurrence of these lesions. These drawbacks have compelled the use of different methods of treatment.[6]

Use of laser therapy has been advocated, but it leads to more scarring, especially in non-mucosal lesions. Yellow light lasers (578-585 nm) have been advocated for oral hemangiomas for selective photothermolysis.[3,7] Sodium tetradecyl sulfate, as a sclerosing agent has been used since many years in the treatment of oral hemangioma. S. Agarwal used 3% STS intralesionally for treatment with successful results. Minkow used 0.1 – 0.5ml of 3% STS also in oral hemangiomas. The results of these authors were comparable with those of our study. However, the number of injections varied according to the size of the respective lesions.[2,3,7,8]

Different authors have cited various complications with the use of this sclerosing agents, like extensive local inflammation, ulceration with fibrosis and tissue contracture. In our study, 2 (13%) patients showed partial regression with resultant residual mass and sloughing. But these patients recovered considerably after one week of therapy with anti-inflammatory and analgesic drugs.[2,4,8]

Conclusion

Variable results have been observed by different authors regarding antimicrobial properties of human wax. Most authors however strongly believe that human wax along with its barrier host defence mechanism, also carry some amount of antimicrobial effect, which does inhibit growth of microbes.[3,5,6] Our study also highlights the antibacterial and antifungal property of human wax. Biochemical changes and pathological role of wax in diseased conditions of middle and external ear has yet to be studied.

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Cite this article as: Mohan N, Prasad S. Non-surgical management of oral hemangioma. Int J Med Sci Public Health 2014;3:121-122.
Source of Support: Nil
Conflict of interest: None declared