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Clinical efficacy of *Jaloukavacharana* (Leech Therapy) in Sub Conjunctival Haemorrhage - A Case Study

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ABSTRACT

Jaloukavacharana or Leech therapy is Medicinal leech therapy which is used in a variety of inflammatory conditions. It is indicated in *Raktaja* and *Pittaja Vikaras*. Its mode of action depends on the injection of leech saliva into patient's tissues during the process of blood sucking. Leech's saliva contains numerous bioactive constituent which possesses anti-inflammatory, analgesic, thrombolytic, anti-coagulant and blood circulation enhancing properties. In the present study a right sided subconjunctival haemorrhage due to RTA (road traffic accident) is managed with *Jaloukavacharana* and healing effects are observed.

Key words: *Jaloukavacharana*, *Subconjunctival Haemorrhage*, *Periorbital Oedema*.

INTRODUCTION

Sub conjunctival hemorrhage is something which is encountered frequently in casualties and in outpatient departments. Subconjunctival hemorrhage occurs as a result of trauma or can be spontaneous.

Traumatic causes include use of contact lenses, vigorous rubbing of eyes and sudden venous congestion to head. Spontaneous causes include hypertension, vascular disorders like diabetes and hyperlipidemia.

These diseases can cause blood vessels to become fragile and spontaneously rupture. Hypertension has

been shown to be the major risk factor for SCH regardless of if the blood pressure is controlled by medication.^[1]

It is usually symptomless except for the red discoloration noted by patients as a serious symptom.^[2]

On examination SCH looks like a flat sheet of homogenous bright red colour with well-defined limits.

CASE STUDY

Presenting complaint

A male patient of 26 years old came to our OPD with complaints of reddish discoloration of the right sclera associated with abrasion over lateral aspect of nose and pain over peri orbital region after an alleged RTA.

History of presenting complaint

Patient was apparently normal before 2 days he had a self-fall from his motorbike while riding and he developed reddish discoloration of right eye an abrasion over lateral aspect of right side of nose associated with pain over right periorbital region. For the same he got admitted in our hospital for further management.

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Past history

No H/O - HTN, DM
H/o Trauma - a self-fall from a motorbike 2 days back

Personal history

Appetite - good
Sleep - disturbed
Bowel - normal
Micturition - normal

Habits

Nonsmoker
Nonalcoholic

Examinations

BP- 130/80 mm of Hg on supine position
Pulse - 78/min regular
Temp - 98.6°F

Systemic

CNS - conscious oriented GCS 15/15
RS - NVBS
CVS - S1, S2 normal, No added sounds
P/A - soft & normal

Local examination

Inspection of eyes - sub conjunctival haemorrhage over right eye 0.5x0.6 cm
Mild oedema over right periorbital region noted
Inspection of wound
Shape - linear abrasion
Size - 5x1cm
Site - right lateral aspect of nose extending cranially
Palpation - mild tenderness over right periorbital region and also the wound over right lateral aspect of nose

Blood investigations

Hb - 12.8gm/dl
TLC - 4,800/cumm
RBC count - 4.43 millions/cmm
PCV/Hematocrit - 34.7%

MCV - 79.8fL
MCHC - 33.6 gm/dl
MCH - 26.9 picogram
Platelet Count - 2.91 Lakh/cmm
Bleeding Time - 02 min 05 sec
Clotting Time - 05 min 20 sec
Blood Sugar Random - 98 mg/dl
HbsAg - Non reactive
HIV 1 (Antibodies) - Non Reactive
HIV 2 (Antibodies) - Non Reactive
Covid 19 (RT-PCR) report -ve

METHODOLOGY

After proper investigation, leech therapy was planned as a first line treatment.

Written consent was taken.

Preparation of the leech - an unused leech of medium size was taken and activated using turmeric water.

Activated leech is made to bite over lateral aspect of right canthus.

After 45 minutes leeches were removed using turmeric powder.

Bite site was applied with turmeric and tightly covered with gauze piece to prevent further bleeding.

1 leech was applied over the side of lateral aspect of right canthus for 45 minutes. Total 3 sittings done

OBSERVATIONS





Treatment day 1



Treatment day 3



Treatment day 5



Day 7

OBSERVATIONS

Symptoms were taken into consideration under grading system according to their severity.

After the first sitting of *Jaloukavacharana* 30% reduction in the reddish discoloration over right sclera was noted; about 30% reduction in pain over right periorbital region and mild reduction of oedema attained.

After second sitting almost 70% reduction in the reddish discoloration over right sclera was noted; 70% reduction in pain and oedema was noted.

After third sitting 90% reduction in the reddish discoloration over right sclera was noted along with complete reduction of pain and oedema noted.

On the 7th day the sub conjunctival haemorrhage of right sclera, pain and oedema resolved completely.

Variables	BT	Day 1	Day 3	Day 5	Day 7
Reddish discoloration	+++	++	++	+	-
Pain	++	++	+	+	-
Oedema	++	++	+	+	-

BT = Before treatment, Mild = +, Moderate = ++, Severe = +++ No symptom = -

RESULT

As soon as the leech application was commenced patient got relieved of periorbital pain

- His discomfort level got reduced.
- After second sitting, redness was also reduced
- After third sitting of *Jaloukavacharana*, patient was completely relieved of all symptoms and is satisfied with the treatment.

DISCUSSION

- Due to the qualities of its anticoagulant, vasodilator, thrombolytic, anti-inflammatory substances, leeches have been proved as medically effective.^[3]

- Through their sucking effect, leeches stimulate circulation of cells at risk of necrosis and maintain oxygenation of the tissue.^[4]
- They therefore promote restoration of capillary anastomosis.^[5]
- They accelerate the subconjunctival haemorrhage decongestion process.

CONCLUSION

The present study proves the effectiveness of *Jaloukavacharana* in treatment of subconjunctival haemorrhage.

REFERENCES

1. Doshi R, Noohani T. Subconjunctival Hemorrhage. [Updated 2021 Aug 11]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK551666/>
2. AK Khurana, Comprehensive Ophthalmology 7th Edition, Jaypee brothers medical publishers, 2001; p.92
3. https://s3.amazonaws.com/academia.edu.documents/36092240/IRJPS_11_3345.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1530014300&Signature=BMIGWJ3wskKsvIU%2Bcee0CTeO1Y%3D&responsecontentdisposition=inline%3B%20filename%3DAn_Overview_on_Hirudo_therapy_Leech_thera.pdf
4. Dr. Sinjid R, Dr. Gopikrishna BJ. Clinical efficacy of Jaloukavacharana (leech application) in Gluteal Hematoma - A Case Study. J Ayurveda Integr Med Sci 2018;4:187-190.
5. <http://dx.doi.org/10.21760/jaims.v3i4.13309>
6. K.R. Srikantha Murthy, Illustrated Susruta Samhita, Vol 1, Chaukamba Orientalia, Varanasi, 2001; p.78

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