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Case Study

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EFFICACY OF JALAUKAVACHARAN IN THE MANAGEMENT OF DUSHTA VRANA W.S.R TO INFECTED WOUND

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ABSTRACT

Aacharya Sushruta the Father of Surgery has describe Vrana and gives detailed information about Vrana. He explain 60 upakramas (Shashthi Upakrama)^[1] in the management of vrana. Sushruta explained Dushtavrana^[3] with its signs and symptoms and with its management. Healing process of vrana depends upon the balance of doshas and when doshas get vitiated then vrana becomes dushta. In modern science we compare dushtavrana with infected wound. Infected wound^[6] can be defined as the wound which has been reacted as infection due to various causes. In Ayurveda Raktamokshan by Jalauka^[4] is quoated by Sushruta as one of the Shashthib Upakrama^[1] in the management of dushtavrana. Jalauka has the Shitaguna,

Madhurras and Pittashamak properties^[4]. Jalauka have been use in health care, since ancient times. The popularity of leech therapy increses over the years during 19thcentury. Jalauka helps to reduce venous congestion so aiding as Plastic surgery as well as reconstructive surgery. The leech saliva contains enzymes and compounds which possess an antinflamatory, anticoagulation and vasodilating effect. Jalaukavacharan in infected wound patient helps in reducing pain, suppress the inflammatory process, hardness, discolouration, tenderness. So this study evaluate the efficacy of jalaukavacharan in the management of Dushta Vrana.

KEYWORDS: Dushthavrana, Jalauka, Infected wound.

INTRODUCTION

Ayurveda is ancient science of life. Acharya sushruta gives the definition of Swastha and Healthy person. Shalyatantra is one of the important branch of Ayurveda in which surgical and para-surgical techniques has described for various diseases. Vrana^[5] is the most important and widely describe chapter of *shalyatantra*.

There are so many factors responsible to make healing process delayed, these are dead tissue, insufficient blood supply, protein deficiency, diseases like diabetes mellitus, tuberculosis etc. Delayed healing of vrana is the major problem seen in day to day surgical practices. Present case study work on these issues. There are many investigations and experiments carried out in medical science to understand phenomenon of wound healing. There are analgesics, antibiotics, and antiseptics use for the treatment of wound but they don't provide the better result with so many adverse effect.

Sushruta the father of surgery gives classification of traumatic wounds, Shudhavrana, Nadivrana, Sadyovrana, Dagdhavrana, There prognostic evaluation and management in the form of sixty upakramas are from apatarpana to rakshavidhana^[1] of which one of upakrama is 'visravan'

Jalaukavacharan in infected wound helps in reduces pain suppress the inflammatory process, hardness, discolouration, tenderness.

In todays era number of patient of infected wound, non healing wounds comes to our opd for treatment, so this topic is selected for studies.

AIM

The main aim of study is evaluate the efficacy of Jalaukavacharan (Leech therapy) in the management of *Dushtavrana* w.s.r. to infected wound.

OBJECTIVES

1. Jalaukaavacharan reduces the sign and symptom like swelling, pain, discharge and helps in healing of wound.

MATERIAL AND METHOD

1) Material

Material use for *jalaukavacharan*^[7]

- 1. Jalauka 2. *Haridra* powder 3. Sterilized gauze pieces 4. Dressing pad 5. Cotton 6. Gloves
- 7. Kidney tray 8. Scissors 9. Cointainers of sterile water

2) Method

A single clinical case of male patient of age 28 yrs. Having *dushta vrana* on left inguinal region. Informed written consent of patient taken for *Jalaukavacharan*. Patient undergone four setting of *jalaukavacharan* once a week on opd basis on 0th, 7th, 14th and 28th day.

Assesment Criteria

- I) Healed Wound completely healed with scab formation
- II) Improved Wound size reduce
- III) Not improved No reduction in size or complication increases e.g. pus formation
- 1) Pain measured by visual analogue scale
- 2) Slough and Granulation can be measure as per the area covered by wound
- 3) Discharge can be rule out on inspection as it may be present or absent

CASE HISTORY

A male patient of age 28 years having OPD Reg. No.6931 came in our college OPD having complaints of:

Pain at left inguinal region

Discharge at left inguinal region

Patient was healthy before 15 days after that he develops above complaints for that he consulted at many private hospitals but do not get relief. At our OPD patient diagnosed as *DushtaVrana* and taken for *Jalaukavacharan*.

Clinical Features

Size (mm^2) - 40 mm

Pain - Present

Discharge - Present

Granulation - Absent

Slough - Present

Foul smell - Absent

Past History

Medical History - None

Surgical History – None

Drug History - None

Family History – None

Ashtavidha Pariksha

Nadi - 78/min. Mala - Samyak

Mutra - Samyak Jivha – Niram

Sabda – Spastha Saparsh – Samsitoshna

Druk – Spastha Akruti – Madhyam

Personal History

Occupation – Private Job

Addiction – None

Diet - Veg + Non. Veg

Appetite – Regular

Urine & Stool – Regular

Systemic Examination

RS – Air entry bi laterally equal and clear

CVS – S1, S2 Normal, No cardiac murmur heared

CNS – Conscious oriented to time place and person

P/A – Soft, tender at If inguinal region

Local Examination

Wound of size 4 x 3 cm present over left inguinal region

Discharge from left inguinal region

Tenderness over left inguinal region.

Redness over left inguinal region

Investigations

Hb - 13.2 gm%

BT - 2.5 / min.

CT - 3.13 / min.

BSL® - 82 mg/dl

HIV- I, II – Non reactive

HbsAg - Non reactive

Serum Creatinine - 1.29 mg/dl

Blood Urea – 32

Chikitsa

1) Jalaukavacharan: For 4 weeks

2) Sthanikchikitsa: Dressing with NS on alternate day

3) Abhyanterchikitsa: Gandharvaharitakichurna as mruduvirechana yoga^[1].

Follow Up

OBSERVATIONS

Symptoms	Follow up (day)				
	0 th	7 th	14 th	21 st	28 th
Size (mm ²)	40mm	30mm	20mm	10mm	Healing present
Pain	Present	Present	Absent	Absent	Absent
Discharge	Present	Present	Absent	Absent	Absent
Granulation	Absent	Present	Present	Present	Present
Slough	Present	Absent	Absent	Absent	Absent
Foul Smell	Absent	Absent	Absent	Absent	Absent

RESULT

As per the assessment criteria

Healed /Improved/ Not improved

A Single case study shows improvement in healing of infected wound.





Day 28th

After Complete Follow up

DISCUSSION

- 1. Patient treated with *jalauka* had yielded better outcome with relief in exudates, granulation and circumference of wound
- 2. Leech stimulate granulation tissue in wound bed
- 3. *Jalaukaavacharan* has high efficacy in both *vranashodhan* and *ropan* without producing any adverse effect hence use as an alternative approach for management of *dushtavrana*
- 4. *Jalaukavacharan* has its own benefit as *jalauka* is Anti phlosistic i.e. use for relief of local inflammation in tissue has capability of improving microcirculation.
- 5. *Jalauka* sucks blood by self regulatory mechanism, so *jalaukavacharan* was taken for study.
- 6. *Jalaukavacharan* being a bio purifactory method removes deep seated toxins by letting out blood, clearing srotasa and purifying viated doshas.
- 7. Hirudin acts as a anticoagulant prevents inflammation perfoms slow cleansing of wound.

CONCLUSION

- 1) This case study shows *Jalaukaavacharan* is highly effective in treatment of *dushtavrana* by reducing discharge, pain, which enhance the granulation and promote the healing
- 2) This treatment is cost effective and easy to apply with use as an alternative apporach.

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