

A CASE STUDY OF DUSTHA VRANA TREATED WITH NIMBA OIL AND TRIPHALA KWATH DHAVAN

Dr. Sonali V. Mane^{*1}, Dr. Rohini Pardakhe² and Dr. Madhuri Sawant³

^{1,2,3}PG Scholar, Govt. Ayurved College, Osmanabad.

Article Received on
24 March 2022,

Revised on 14 April 2022,
Accepted on 04 May 2022

DOI: 10.20959/wjpr20226-24060

***Corresponding Author**

Dr. Sonali V. Mane

PG Scholar, Govt. Ayurved
College, Osmanabad.

ABSTRACT

Wound is described as a break in the continuity of any body tissues. Ayurveda as described many formulations, medicines for oral as well for local applications to accelerate wound healing. In Ayurved chronic wounds are called Vrana. These are subcategorized into sadyavarna (acute) and dustavarna(chronic). There fore I am presenting a case of 51 year old married male with complaints of wound over posterior aspect of right elbow joint with pain, foul odour, non-healing since 4 months inspite of taking allopathic medicines. On examination it was found that surface area of wound was 22*18*0.3 cm having skin loss

involving necrosis of subcutaneous tissue. Neccesary investigations and viral markers were done prior to initiation of treatment. The wound was irrigated with Triphalakwathand dressing was done with Nimbaoil daily followed by oral intake of triphalagugglu 500mg twice in a day, Shigru swarasand Guduchiswaras15 ml twice a day for 30 days. Periodic follow up was done. This was helpful in faster wound healing, Epithelization and reducing wound exudates.

INTRODUCTION

A chronic wound may be defined as one that is physiologically impaired due to circulation of the wound healing cycle as a result of impaired angiogeneneis, innervation or cellular migration.^[1] Wound healing is a complex cellular and biochemical cascade that leads to restitution of integrity and function.^[2] Factors that impede normal healing include local, systemic and technical conditions that surgeon must take into account.^[3] Chronic wounds are defined as a wounds that have failed to proceed through orderly process that produces satisfactory anatomic and functional integrity. The majority of wounds that have not healed in 3 months are considered chronic.^[4] Repeated trauma, poor perfusion or oxygenation and /or

excessive inflammation contribute to causation and the perpetuation of chronicity of wounds.^[5] In Ayurveda, topical applications and internal medicine are given to accelerate wound healing. Therefore the quest for finding new drugs/formulations has developed.

CASE REPORT

A 51 year old married male with complain of wound over posterior aspect of right elbow joint with pain, foul odour, non healing since 4 months inspite of taking allopathic treatment was attend in outpatient department. On examination it was found that surface area of wound was 22*18*0.3 having skin loss involving necrosis of subcutaneous tissue. Wound was caused by road traffic accident. His vitals were normal and systemic examination had no significant morbidities. He was non-smoker and non-alcoholic. After taking present and past history, patient was advised with routine blood investigations like blood sugar fasting and post prandial, bleeding time, clotting time, serum proteins, ESR, KFT, LFT. On basis on his history and laboratory investigations he was diagnosed with jirnavrana(chronic non healing wound).

Procedure and drug intervention

Under all aseptic precautions wound was irrigated with Triphala kwath. After proper scrapping and after removing unhealthy granulation tissue, sterile Nimba oil was applied. Wound was dressed with non adherent primary dressing. Internally patient was given Trifala guggulu 500mg twice daily after food Shigru swarasand Guduchi swaras 15ml twice daily given for 28 days.

Total duration of treatment-28 days

DRUG	DOSE AND DURATION	ANUPANA
Triphala guggul	500mg twice in a day for 28 days	Normal water after food
Nimba oil	Adequate quantity	For local application
Shigru swaras	15 ml twice in a day for 28 days	Normal water after food
Guduchi swaras	15 ml twice in a day for 28 days	Normal water after food
Triphala kwath	Adequate quantity	For local application

Assessment tool

1) Skin Colour Surrounding Wound

1. Pink or normal for ethnic group
2. Bright red &/or blanches to touch
3. White or grey pallor or hypo pigmented
4. Dark red or purple &/or non-blanchable

5. Black or hyper pigmented

2) Granulation Tissue

1. Skin intact or partial thickness wound
2. Bright, beefy red; 75% to 100% of wound filled &/or tissue overgrowth
3. Bright, beefy red; < 75% & > 25% of wound filled
4. Pink, &/or dull, dusky red &/or fills < 25% of wound
5. No granulation tissue present

3) Epithelialization

1. 100% wound covered, surface intact
2. 75% to < 100% wound covered &/ or epithelial tissues extends to >0.5cm into wound bed
3. 50% to < 75% wound covered &/ or epithelial tissues extends to <0.5cm into wound bed
4. 25% to <50% wound covered
5. <25% wound covered

4) Edges

Indistinct, diffuse, none clearly visible

Distinct, outline clearly visible, attached, even with wound base

Well-defined, not attached to wound base

Well-defined, not attached to base, rolled under, thickened

Well-defined, fibrotic, scarred or hyperkeratotic

5) Necrotic Tissue Type

1. None visible
2. White/grey non-viable tissue &/or non-adherent yellow slough
3. Loosely adherent yellow slough
4. Adherent, soft, black eschar
5. Firmly adherent, hard, black eschar

RESULT

SR.NO	Wound Character	Baseline Score	Score at 7 days	Score at 14 days	Score at 28 days
1	Skin colour surrounding wound	5	3	2	1
2	Granulation Tissue	5	4	2	1
3	Epithelialization	5	4	3	2

4	Edges	5	4	3	1
5	Necrotic tissue type	5	3	2	1
	TOTAL	25	18	12	6

Periodic follow up photographs



BbBase line (fig -1)



Es7th day(fig-2)



Sdss14th day(fig-3)



Dsfsd28th day(fig -4)

DISCUSSION

Wound healing is a complex process that have four basic processes which includes- inflammation, wound contraction, epithelialization, granulation tissue formation and scar remodelling.^[6] All wounds need to progress through this series of cellular and biochemical events that characterizes the phases of healing in order to successfully re-establish tissue integrity.^[7] The basic principle is to minimize the damage to the tissues, provide nutrients, oxygen to the healing tissues and optimization of environment for rapid wound healing.^[8] In

this case after irrigation with Triphala kwath and application of Nimba oil, the wound size decreased. This shows accelerated wound healing. Application of Nimba oil and Triphala guggulu, Shigru and Guduchi swaras orally improved wound edges on 7 and day 14.

In chronic wound the bio burden is more hence exudate is more and contains bacteria and other tissue metabolites. In this case on day 7 and 14 exudate was decreased and healthy granulation started. Triphala guggula consists mainly triphala and guggul. Triphala has immunomodulatory and tridosha samak property and it reduces oxidants and improve wound healing. Guggul consists anti-inflammatory effects which decrease the tissue oedema of peripheral skin around the wound.^[9] Nimbidin is the major chemical component in nimba which is bitter and contains sulphur, sulphur has antibacterial.

Antifungal and keratolytic properties.^[10] Shigru is katu and usha which helps in deepan, panchan, shoolprashman and krimigana.^[11] Guduchi is tikta kshaya, usna which is used for anti-inflammatory, immunomodulatory and anti-diabetic properties in chronic wounds.^[12]

CONCLUSION

Irrigation of Triphala kwath followed by local application of Nimba oil and oral administration of Triphala guggul, Shigru swarasa, Guduchi swarasa was found effective in faster wound epithelisation and reducing wound exudates. Hence this can be safely used in chronic non-healing wound.

REFERENCES

1. Golink, MS, Clark S, et.al, Wound emergencies: The importance of assessment, documentation and early treatment using a wound electronic medical record. Ostomy wound manage, April, 2009; 55: 54.
2. Schwartz's PRINCIPLES OF SURGERY, F. Charles Brunnicardi, tenth edition, part 1: pg no-242.
3. Schwartz's PRINCIPLES OF SURGERY, F. Charles Brunnicardi, tenth edition, part 1: pg no-242.
4. Schwartz's PRINCIPLES OF SURGERY, F. Charles Brunnicardi, tenth edition, part 1: 259.
5. Schwartz's PRINCIPLES OF SURGERY, F. Charles Brunnicardi, tenth edition, part 1, pg no-259.
6. Textbook Of Surgery, S.Das, 10 edition, Chapter no 1, pg no-2.

7. Schwartz's PRINCIPLES OF SURGERY, F. Charles Brunicaudi, tenth edition, part 1.
8. Bennett NT, Schultz GS Growth factors and wound healing: biochemical properties of growth factors and their receptors. The American Journal of Surgery, Jun 1, 1993; 165(6): 728-37.
9. Ya C, Gaffney SH, Lilley TH, Haslam ELN RW, Karchesy JJ, Chemistry and significance of condensed tannins.
10. Ter Riet G, Kessels A G. Randomized clinical trial of ascorbic acid in the treatment of pressure ulcers, 1995.
11. Prof. P.V. Sharma, Dravyaguna-vijnana, volume -2, chaukhambha bharati academy, chapter 2, pg no -111.
12. Prof. P.V. Sharma, Dravyaguna-vijnana, volume -2, chaukhambha bharati academy, chapter 2,pg no -760.