

A CLINICAL TRIAL ON HEALING PROPERTY OF YASTIMADHU (GLYCYRRHIZA GLABRA) WITH REFERENCE TO WOUND

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ABSTRACT

In surgical practice wound healing is a big challenge for surgeon. There are so many drugs available for wound healing according to various samhitas in Ayurveda. This clinical study is to evaluate the action of drug Yastimadhu in management of wound. The drug Yastimadhu is well known drug for wound management as described in various Ayurvedic classics but a scientific base of this aspect is still required, so the present study has framed to assess its result on various parameters on wound healing.

AIM AND OBJECT: To evaluate the efficacy of yastimadhu in the management of wound and also it's remaining scar and to provide a easily available and cast effective harmless drug for healing of wound.

STUDY DESIGN: Clinical trial has been done on randomly selected 30 patients of all categories those who were fulfilling the criteria of selection trial, in Pt. Khushilal Sharma Govt. Ayur. College and Hospital Bhopal M.P after taking written consent of patients about trial work. The selected patients categorized in single group and parameter of sign and symptoms scored on basis of slandered method statistical analysis. Dusting of fine powder of yastimadhu has been applied on wound for 7 to 15 days three times a day as per requirement.

Inclusion criteria below the age 60 year and for both the sex. Patients who have major illness like Diabetes mellitus, Tuberculosis, Leprosy, STD, Autoimmune disorders, Malignancy diseases Hemophilia Jaundice were excluded for the study. The assessment of the result will be purely based on sign and symptoms like inflammation, tenderness, pain, redness, color, floor, discharge, granulation tissue and swelling.

KEYWORDS :

INTRODUCTION

Acharya Sushruta is known as the father of surgery. He was the first surgeon who had elaborated the concept of wound with their all possible management. He had described 60 procedures for wound care and also mentioed the complications of wound due to ignorance.

Yastimadhu is the drugs which is very effective in wound management. Acharya Charak mentioned its importance in Agrya Dravya.

मधुकं चक्षुश्यवश्यकेश्यकण्ठ्यवर्ण्यविरजनीयरोपणीयानां (Ch. Su25/40)

According to Acharya Shusrut and Vrinda madhava -Pain of the accidental wound is resolved by applying locally Yastimadhu mixed with warm Ghrita-

या वेदना शस्त्रनिपातजाता तीव्रा शरीरं प्रदुनोति जन्तोः ।

घतेन सा शान्तिमुपैति सिक्ता कोशणेन यटीमधुकान्वितेन ॥ -सु.सू.अ. 5

MATERIAL AND METHODS

Patients-

For this clinical trial the patients were selected ;those who fulfill the criteria of selection and attained O.P.D.and I.P.D. section of department of shalya tantra from "Pt.Khushi Lal Sharma Government (Autonomous) Ayuvedic College and Institute Bhopal (M.P)

Written Consent

Study design

- Name of drug- Yastimadhu Churna
- Local application-3Times in a day
- Duration-7 to 15 days

Investigation

- CBP
- BT & CT
- ESR
- RBS
- HIV
- Urine-Routine & Microscopic
- Sputum test for AFB & X-Ray
- Lepromin test

Measurement of wound by Sialing method:-

Fig. 3.1 Measurement of Wound by scaling method



Fig. 3.2 Wounds of before and after treatment



Criteria for assessment-

The assessment of the result were purely based on sign and symptoms

- Size
- Pain
- Tenderness
- Burning
- Colour
- Floor
- Discharge
- Granulation
- Tissue
- Swelling

RESULT

In this study maximum 43.33% patients were healed within 10 days ,where as 23.33% were healed within 15 days with less remaining scar. In this study maximum 90%case were observed completely cured in all cases of wound whereas 6.67% treated cases of wound were markedly improved (<75%->100%) and 3.33% cases of wound were moderately improved (>50%-<75%) after this study.

Statistical assessment of result-

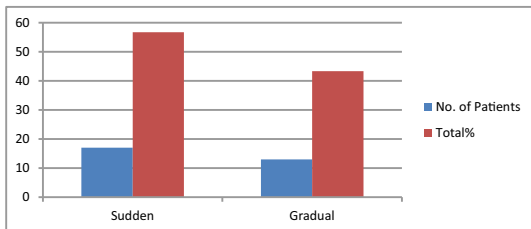
Percentage of relief was calculated to know the efficacy of trial drug and conclusion was drawn after applying suitable statistical analysis

Statistical Assessment- Application of Wilcoxon on signed –rank test

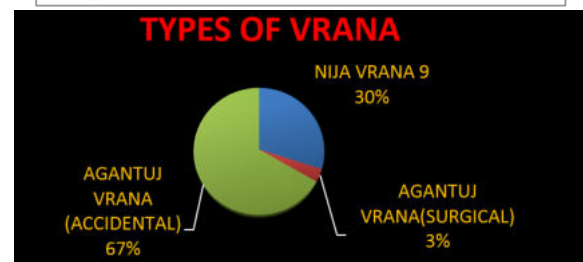
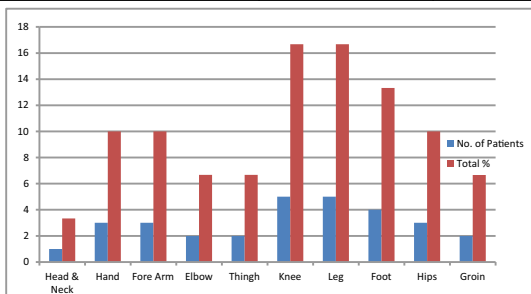
Statistical Estimation of results- The obtained results were interpreted as-

Onset of Vrana	No. of Patients	Total%
Sudden	17	56.67
Gradual	13	43.33

Onset of Vrana wise distribution of 30 patients



Types of Vrana	No. of patients	Total%
Nija Vrana	9	30
Agantuj Vrana (Surgical)	1	3.33
Agantuj Vrana(Accidental)	20	66.67

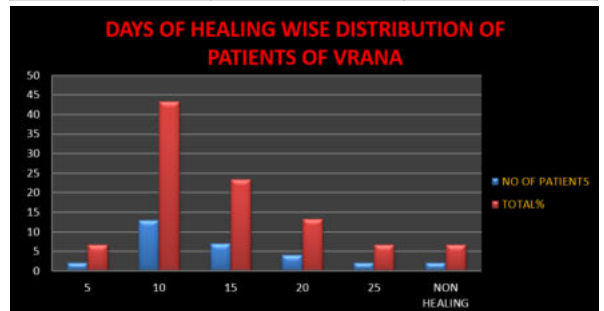


Site wise distribution of 30 patients of Vrana

SITE OF WOUND	NO. of Patients	Total%
Head & Neck	1	3.33
Hand	3	10
Fore-Arm	3	10
Elbow	2	6.67
Thigh	2	6.67
Knee	5	16.67
Leg	5	16.67
Foot	4	13.33
Hips	3	10
Groin	2	6.66

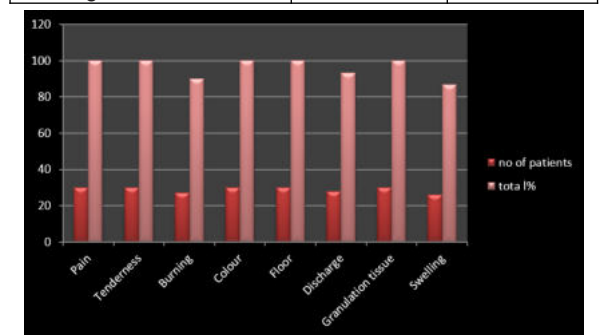
Days of healing wise distribution of 30 patients of Vrana

Days of Healing	No. of Patients	Total%
Within 5 days	2	6.67
Within 10 days	13	43.33
Within 15 days	7	23.33
Within 20 days	4	13.33
Within 25 days	2	6.67
Non Healing	2	6.67

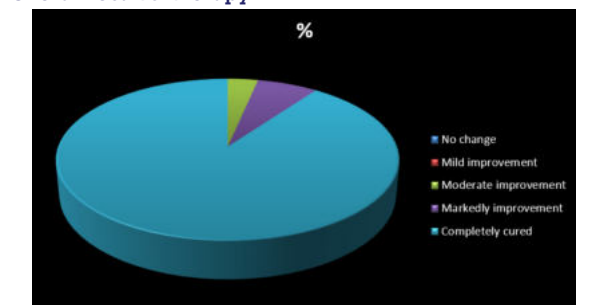


Presence of cardinal symptoms of vrana in 30 patients

Cardinal sign & Symptoms	No. of Patients	Total %
Pain	30	100
Tenderness	30	100
Burning	27	90
Color	30	100
Floor	30	100
Discharge	28	93.33
Granulation tissue	30	100
Swelling	26	86.67



Overall result of therapy



No change	-
Mild Improvement	-
Moderate Improvement	3.33%
Markedly Improvement	6.67%
Completely Cured	90%

DISCUSSION

Types of vrana- Maximum 66.67% cases were accidental while 30% & 3.33% were surgical and Nija Vrana

Site- In this study maximum 16.67% were having wound of knee & same percentage found in leg, the reason behind this must be maximum Aghataj vrana were happened due to road accidents.

Days of healing- In this study maximum 43.33% patients were healed within 10 days where as 23.33% were healed within 15 days with less remaining scar.

Discussion on Characteristic Clinical Features-

This study shown extremely significant on all sign and symptoms of wound, because the drug was under trial & slandered promoted healing with natural process & check the Vrana.

Effect of size- The size was decreased up to 93.81% which was statistically extremely significant.

Effect on pain- Pain was reduced up to 96% which was also statistically extremely significant.

Effect of Tenderness- The tenderness was reduced up to 94.34% which was also extremely significant.

Effect on burning sensation- Burning sensation reduced up to 88.51% which was also extremely significant.

Effect on color- Color was reduced up to 61.90% which was statistically extremely significant.

Effect on floor- The floor was achieved up to 95.53% which was statistically extremely significant.

Effect on discharge- Discharge was reduced up to 95.09% which was statistically extremely significant.

Effect on Granulation tissue- The granulation tissue was improved up to 95.21% which was statistically extremely significant.

Effect on Swelling- The Swelling was reduced up to 94.84% which was statistically extremely significant.

OVERALL RESULT OF THERAPY-

In this study maximum 90% cases were observed completely (100%) in all cases of Agantuja Vrana as well as Vrana having onset within 30 days, whereas 6.67% treated cases of wound were completely cured (<75%->100%) & 3.33% cases of wound were moderate improved (>50%-<75%) after this study.

CONCLUSION -

The present study entitled "Pharmacological study of Yastimadhu with reference to Vrana" has been done under a clinical trial of a single group of randomized selected 30 patients of K.L.S.Govt.Ayu.College & Institute Bhopal (m.p.). On the basis of this study following conclusion can be drawn-

1. Yastimadhu heals wound through prasadan (purification) & brihana (dhatu poshana) property of guru guna, dhatu poshana, & Snigdha guna, Sandhaniya, Daha - shamaka property of madhura rasa, rakta stambhan, prasadana, Dhaha shamak property of sheet veerya.

2. During this trial it was found that the healing time of wound of joints was more than the the other wound due to mobilization of the part, also according to Acharya Shushrut the wound of sandhi (joints) is dushchiktsiya vrana.
3. Based on overall percentage of relief it can be concluded that 90% treated cases of wound were completely cured whereas 6.67% treated cases of wound were markedly improved & 3.33% cases of wound were moderate improved, which was statistically extremely significant.
4. During this clinical trial no adverse effect were found hence this study favours the local application of Yastimadhu in the management of vrana.

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