



## ROLE OF YASHTIMADHUADI GHRITA FOR THE MANAGEMENT OF AGNIDAGDHA WOUND

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### ABSTRACT

Science is not solely a collection of facts and relationship but is more than a composite of these facts, acquired and consistently correlated over the ages. Our classics of Ayurveda has accentuated at various places to take care of wounds which occurs either due to vitiated dosha's or due to any type of trauma. Agni Dagdha (Burn) is a wound in which there is a coagulative necrosis of the tissue which can be caused due to dry heat with fire, open flame, moist heat e.g. hot liquid or steam.<sup>[1]</sup> In this present era, due to massive industrialisation, incidence of burn wound is increased. The estimated annual burn incidence in India is approx. 6-7 million per year.<sup>[2]</sup> Considering the number it is quite essential to look for an alternative medicinal practice such as to study the efficacy of Yashtimadhu ghrita in Agni Dagdha (Burn) wound, for this study 15 patients were randomly selected and efficacy of this drug was put into trial on these patients. On completion of this trial it was found that the Yashimadhu Grita has effectively helped patients in recovering from Agni Dagdha (Burn) wound.

### INTRODUCTION

The word dagdha is been derived from "Dhatya sma iti" meaning- which burns.

India is blessed with a great heritage of traditional knowledge on medicine. Ayurveda being the most ancient and still successfully practiced sciences, many years back, ancient acharyas have mentioned much easily available and clinically useful topical herbal applications.

In this article we are referring to the "Role of yashtimadhuadi ghrita in Agnidagdha w.s.r to 1<sup>st</sup> and 2<sup>nd</sup> degree burn. Acharaya 'Sushruta' mainly emphasises the importance of lepa in dagdha vrana as it reduces or alleviate daha, shotha, vedana, sphota and does vrana ropana.<sup>[3]</sup> Acharaya Sushruta has classified Agnidagdha under four distinct heads viz.,<sup>[4]</sup>

- Plushtam- A burn characterized by the discolouring of its seat and extreme burning and marked by the absence of any vesicles or blister is called the plushta.
- Dur-dagdham- A burn which is characterised by the eruption of large vesicles or blisters and assumes a red colour and is characterised by excessive burning and a kind of drawing pain and which suppurates and takes a long time to heal is called the Dur-dagdha.

- Samyaga-dagdhm- A burn which is not deep (superficial) and assumes the colour of a ripe taala fruit and does not present a raised or elevated aspect and develops the preceding symptoms is called the Samyaga-dagdhm (fully burnt one).
- Ati-dagdham- A burn in which the flesh hangs down and where the veins, nerves and bones are destroyed, accompanied with fever, burning, thirst, fainting and such like disturbances and which leads to a permanent disfiguration of the body, retarding the healing which leaves a cicatrix even after healing is called as the Ati-dagdha.

Classification of Agnidagdha on the basis of cause of burn<sup>[5]</sup>

- Ruksha Dagdha- caused by dry heat e.g. metallic burn, hot pan, iron etc.
- Snigdha Dagdha- caused by hot liquids e.g. boiling water, oil, coal tar etc.

Among these two varieties, the snigdha burn is said to be more painful because of property of snigdha drug to enters the minute channels along with heat and destroys the deeper tissue immediately.

Treatment prescribed in modern medicine have some limitations like it can't prevent eschar, hypertrophic scar and post burn contracture which harms as a cosmetically. So, to overcome all these deficiencies we can apply"

yashtimadhuadi ghrita” as a local application in the 1<sup>st</sup> and 2<sup>nd</sup> degree burn as it is an excellent vrana ropana and is best for surface infection. The ingredients used in ghrita helps in cooling and soothing effect on burnt area, moreover have good anti-bacterial, anti-microbial properties along with shoola shamana and promotes faster wound healing.

### AIMS AND OBJECTIVES

To study the effect of “yashtimadhuadi ghrita” on agnidagdha w.s.r to 1<sup>st</sup> and 2<sup>nd</sup> degree burn.

### MATERIAL AND METHODS

The present study was performed on 15 patients suffering from agnidagdha i.e. especially 1<sup>st</sup> and 2<sup>nd</sup> degree burn, selected randomly from patients attending OPD at Shri Sain Charitable hospital, Urban wing Janipur Jammu.

#### Consent

An informed written consent of all patients included in the study will be taken the language best understood by them.

Type of study- prospective open controlled study.

#### Drug and dose

Yastimadhuadi ghrita will be prepared according to Sushruta Samhita sutrasthan chapter 12/27-28 and will be applied locally on agnidagdha vrana as required.<sup>[6]</sup>

#### Drug contents

- Bee wax
- Madhukam
- Lodhra
- Sarjarasa
- Manjishta
- Chandana (red)
- Murva

Collection and method of drug preparation-

The raw drugs are collected from shop and medicine is prepared according to Sushruta Samhita chapter 12/27-28.

### CLINICAL STUDY

Source of data – Patients attending Opd of Shri Sain Charitable hospital urban wing Janipur Jammu.

Intervention- After proper cleaning of wound with sterile saline or water or decoction prepared by ksheeri vriksha like udumbaradi, Yashtimadhuadi ghrita should be applied over wound and bandaging is done.

Duration of treatment- 2 weeks

Follow up- Patients are made to report to the hospital after every alternate day for 2 weeks for bandaging and for follow up study.

### INCLUSION CRITERIA

Sex- Either sex

Age- No limits

Burn surface area- Patients having up to 25% burn, 1<sup>st</sup> and 2<sup>nd</sup> degree burn.

Body part- Any body part/ complete body.

Source of burn- Due to heat including dry and moist, within one week of burn incidence.

### EXCLUSION CRITERIA

Burn surface area- Patients having more than 25% burn, 3<sup>rd</sup> degree burn (asthi and sandhi dagdha).

Patients- Patient suffering from Diabetes, HIV, Hept.B

Source of burn- Electrical, chemical, frost and radiation burn, toxemia, septicemia.

Time lag- More than 1 week of burn incidence.

### DAIGNOSTIC CRITERIA

A. Our diagnostic criteria are based on the clinical features of agnidagdha (burn) mentioned in Sushruta Samhita on the basis of condition of burn i.e. the four types of Pramad dagdha.

B. Laboratory investigations which includes CBC, BSF, Urine RE/ Microscopic.

### OBSERVATION AND ASSESSMENT CRITERIA

The patient’s response was assessed based on subjective and objective criteria. The subjective parameters of pain, secretion, smell, colour and objective parameters of size, healing time, were recorded on the basis of score adopted with grading (0,1,2,3,4). After completion of treatment, assessment of scar was done on the basis of gradation (0,1,2,3,4).

The severity of the symptoms of agnidagdha vrana is assessed after every alternate day. The dagdha vrana gandha, vrana, vedana, srava were recorded before and after treatment.

#### VEDANA (pain)

- 0- No pain
- 1- Pain on exaggeration
- 2- Pain on slight movement
- 3- Continuous pain

#### VARNA (Colour)

- 0- Pinkish red
- 1- Normal reddish colour
- 2- Whitish yellow colour
- 3- Yellow slough formation

#### SRAVA (Secretions)

- 0- 1-2 pad
- 1- 3-5 pad
- 2- 6-8 pad

#### GANDHA (Smell)

- 0- No smell
- 1- Smell present

## PROBABLE MODE OF ACTION OF YASHTIMADHUADI GHRITA

Yastimadhuadi ghruta mentioned in Sushruta Samhita in Agnidagdha vrana adhaya of sutrasthana has a commendable result. The main ingredients used in this medicament are- Bee wax, Madhukam, Lodhra, Sarjarasa, Manjishta, Chandana (red), Murva and Goghrita.

Goghrita- which itself is having samskaraanuvarti which create good medium for absorption transport and delivers of the ayurvedic formulation to the dagdha area of the body. Moreover, ghruta possess vatahara, pitta shamaka, ropaka, dahasShamaka, properties which are very crucial for the healing of the dagdha vrana. In order to this Goghrita contains vit A, D, E, K. Vitamin A &K are anti-oxidants and are helpful in preventing oxidation injury to the tissues. Vit. K keeps epithelial tissues of the body intact and linolenic acid present in ghruta helps in granulation.<sup>[7]</sup>

Bee wax- Also called as madhuchishtha, has many healing properties. The anti-inflammatory properties encourage burn wound healing. It is also protective, helping as a barrier between the skin and the environment without clogging pores, it acts as anti-bacterial helping reducing the risk of contamination. Its main constituents are Palmitate, palmitoleate and oleate esters. It is effective in healing bruises, inflammation and burns.<sup>[8]</sup>

Madhukam – Yashtimadhu contains glycyrrhizin and asparagine as an active ingredient. Glycyrrhizin is a saponin widely used as an anti-inflammatory agent. Asparagine is a type of amino acid and act as an analgesic (natural pain killer) and anti-inflammatory.<sup>[9]</sup>

Lodhra – The bark of this tree yields colloturine, harman and loturidine. The paste of the bark of Symplocos Racemosa is applied over the area affected with localised swelling and wound as treatment, as it promotes healing.<sup>[10]</sup>

Sarjarasa – The resin of Shala Herb is sweet, astringent, hot in nature & has an antimicrobial property. It also helps in relieving pain due to wounds and burns. It has antitoxic properties, and also cleanses wound and quickens wound healing.<sup>[11]</sup>

Manjistha – Mollugin is the active compound found in this plant which has very competent anti-inflammatory property.<sup>[12]</sup>

Chandan – Main ingredients are Pterocarpol, Satalin A and B. Due to its Sheeta Veerya it is a good coolant agent that helps in reducing burning sensation and due to its rooksha property it dries the wound.<sup>[13]</sup>

Murva – The bark of the shoots contains milky juice containing Caoutchouc. The root and seed contain

Pregnane glycosides. Murva root paste is applied over the area affected with skin disease.<sup>[14]</sup>

## RESULTS

The present study revealed the overall results after treatment in patients by Yastimadhuadi ghruta.

Symptoms	% Of Reduction In Symptoms
1. Pain (Vedana)	81.79
2. Secretions (Strava)	93.01
3. Colour (Varna)	86.69
4. Smell (Gandha)	95.51
5. Burning Sensation	90.53

- Post Healed Wound Progress- Discoloration, contracture and keloid absolutely not observed in any burn patient treated with Yastimadhuadi ghruta.

## CONCLUSIONS

Burn exerts a calamitous influence on people not only physically and financially but also mentally. Yastimadhuadi ghruta is a traditional medicine which plays an important role in curing this kind of wound.

This article was found very useful in the management of burn wound by application of Yastimadhuadi ghruta. This ghruta showed good healing property, effective in relieving pain and also prevents formation of discoloration, eschar and contracture which gives better cosmetic relief to the patients of burn.

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