

# ROLE OF AYURVEDIC MEDICINE “WOUND HEALER OIL AND POWDER IN AGNIDAGDHA”

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## ABSTRACT

*Traditional medicines have been used by the people in recent years, there has been a significant global upsurge in the use of traditional medicine because of various reasons including the fact that inspite of advancement in the health sector equitable care, coverage availability, accessibility & affordability to conventional health care & services are quiet often beyond the reach of large section of people. Agni Dagdha (Burn) is an accidental as well as suicidal injury encountered by surgeon in day to day practice .Acharya Sushruta, pioneer of Indian surgery explained Agni Dagdha [3] and its management in 12th Adhyaya of Sutrasthana. Agni Dagdha is the thermal co-aggulative necrosis of tissue as a result of injury caused due to fire, moist heat, chemicals, electrical etc. Burn exerts a catastrophic influence on people not only physically and financially but also mentally. In India incidence of burn is approx 10 lac per year. “Wound healer Oil and Powder” is a kind of traditional medicine which plays an important role in curing this kind of wounds. “Vietnam War” is the best example which describes the benefit of using traditional Medicine for curing wounds.*

**Key Words:** *Agni Dagdha (Burn), Traditional Medicines, Wound Healer Oil and Powder, Vietnam WaR*

## I. INTRODUCTION

Since 1000 years back, ancient Indian sages and acharayas have mentioned much easily available and clinically useful tropical herbal applications[1]. In this article we are referring to the “Wound healer oil and powder” used particularly for “Itaratha Dagdha” (burn and scalds).

Sushruta has classified Agni Dagdha as below on the basis of cause of burn:

**Ruksha Dagdha** – caused by dry heat e.g. Metallic burn, hot pan, irons etc.



**Figure No.1: Burn patient caught fire on clothes while cooking food.**

**1.2 Snigdha Dagdha** –caused by hot liquid e.g. Boiling water, oil, coal tar etc.

Among these two varieties the Snigdha Dagdha is said to be more painful than Ruksha Dagdha because in case of Snigdha Dagdha, Sneha Dravya enters the minute channels along with heat and destroys the deeper tissues immediately.[2]



**Figure No. 2: Showing burn patient due to hot water.**



**Figure No.3: Burn patient accidentally poured with hot cooking oil.**

Treatment prescribed in modern medicine have some limitations like it can't prevent eschar, hypertrophic scar, post burn contracture which harms as a cosmetically. So to overcome these deficiencies we can apply "*Wound Healer Oil and Powder*" as local application in the 1st, 2nd and to some extent in 3rd degree burn. As "*Wound Healer Oil*" is good for Vrana ropan & "*Wound Healer powder*" is good for surface infection, Shool shaman and retained moisture which promotes faster wound healing as well as prevent eschar formation so keeping above points in mind decided to work on this medicine.

## II. AIMS AND OBJECTIVE

1. To study the effect of “Wound Healer Oil and Powder” on burn (1st, 2nd and to some extent on 3rd degree).
2. To study the effect of in the management of burn.[4]
3. To study the effect of Wound Healer Oil and Powder on eschar hypertrophic scar and contracture.

## III. MATERIAL & METHOD

### 3.1 Source of data

**3.1.1 Literature:** literary aspect of the study will be collected from ayurvedic & modern texts updated with recent medical journals & internet.

**3.1.2 Drugs:** Raw material required for preparation will be collected from the genuine shop.

### 3.1.3 Clinical source

Patients attending O.P.D & I.P.D of M.L.R.Ayurvedic college & Seth Luxmi Narayan Sawadiya hospital, charkhi Dadri will be selected for study .O.P.D , I.P.D & Laboratory and other provisions of the hospitals are availed to intend work.

### 3.2 Drug

3.2.1) Composition of Wound healer oil & Powder:- Mustard oil,*Shorea robusta* etc.

3.2.2) Preparation of Medicine: Medicine prepared as per Ras Tarangini in the Dept. of R.S.B.K of M.L.R Ayurvedic College & hospital, charkhi Dadri( Haryana)

### 3.3 Method of collection of data

- Ingredients will be procured according to siddhi lakshana of taila as per sharangdhar samhita..
- Burn patients will be selected acc. to degree of burn & extent of total surface area burn irrespective sex, occupation, & socio-economic status.
- ✓ Study Design: It is Randomised Single Blind Trial in which a minimum sample on 30 patients will be divided into two groups.
- ✓ Drug Study

Due to Snigdha property of “wound Healer Oil and Powder”, it prevents dryness of burn wound. It prevents the loss of water from the exposed tissue and prevents infection. Wound Healer Oil and Powder has *Ropana (Wound Healing)* property by producing optimal quality of granulation tissue. It has shool shaman property and provides moisture to the burn wound and hence prevents eschar and reduces the pain of burn patient. By using Wound Healer Oil and Powder prevents formation of discoloration, eschar, contracture which gives better cosmetic relief to the patient of burn in comparison of and hence today’s modern era Wound Healer Oil and Powder may become a choice for the management of burn for early healing property, prevent the infection and cosmetic purpose.

### **3.4 Sample size & Grouping**

\* Group A- 15 patients were treated with irrigation of neem water followed by local application of Wound Healer Oil and Powder

\* Group B- 15 patients were treated with irrigation of normal saline followed by local application of as cream of Ranbaxy pharma

After getting the result, “Wound Healer Oil and Powder” was applied on almost 100 patients with positive result.

## **IV. SELECTION CRITERIA**

### **4.1 Inclusive**

- ✓ Burn Surface Area: Patient having up to 25% burn, 1st, 2nd degree and to some extent (Sira and Snayu ) of 3rd degree burn.
- ✓ Body Part: Complete body
- ✓ Age group: Treatment is given irrespective of age, sex, & occupation,
- ✓ Source of Burn: Due to heat including dry & moist, within one week of burn incidence

### **Exclusive**

- ✓ Burn Surface Area: Patient having more than 25% burn, 3rd degree burn. (Asthi and Sandhi Dagdha)
- ✓ Patients: Diabetes, HIV, Hepatitis B.
- ✓ Source of Burn: Electrical, chemical, frost and radiation burn, Toxemia, Septicemia.
- ✓ Time Lag: Within 20 days in case of 1st & 2nd degree burn and within one week of burn incidence in 3rd degree burn.

### **4.2 Diagnostic Criteria**

The clinical features of agni dagdha (burn) mentioned in Sushrut Samhita and in modern aspects patients will be taken as on the basis of diagnosis.

Acharya Sushruta has classified Agni Dagdha on the basis of condition of burn (Pramad Dagdha) as below:

**A.** This Pramad Dagdha[5] has four types.

- Plushtadagdha - A condition where there is discoloration (redness) and severe burning sensation in a burn area, it is called plushta dagdha(Superficial partial thickness burn).
- Durdagdha - In this condition there is eruption of blisters associated with severe burning sensation, redness, inflammation, pain, the wound takes long time to heal. Different types of pain felt by patient like sucking, burning etc. There will be erythema and suppuration of the wound. Pain will be more and heals lately. (Second degree burn).
- Samyakdagdha - The wound which is no deep seated, color is like that of Tala phala (palm fruit, Blackish at borders and whitish at center) and it is of optimum depth. Susamsthit means without elevation or depression.
- Atidagdha - There is presence of excessive necrosed muscle etc. in the wound area, person's body is stiff, severe pain all over body, suffers from fever , excessive thirst and loses consciousness. (III degree burn)

According to comparative study in modern extent of burn is divided into four types:[6]

- First degree Burn, usually red, dry and painful. These Burns are often superficial second degree burns, with sloughing occurring the next day.
- Second Degree Burns are red, wet and very painful. Their depth, ability to heal, and propensity to form hypertrophic scars vary enormously. Inflammation, swelling and blister formation occur at this degree of burn.
- Third degree burns are generally leathery in consistency, dry, insensate and waxy. At this stage there is involvement of underlying subcutaneous with no harm to sensations and sweat glands
- Fourth degree burns is the highest degree of burn where destruction of apocrine & eccrine sweat glands, subcutaneous tissue, tendon or bone take place.

**B. Laboratory investigation**

Lab Investigations: CBC, BSL random, BT CT, Urine Routine and HIV.

**Observations**

- ✓ Vedana (Pain)
  - No pain
  - Pain on exaggeration
  - Pain on slight movement
  - Continues pain
- ✓ Vranavarna (Colour)
  - Pinkish red
  - Normal reddish color
  - Whitish yellow color
  - Yellow slough formation
- ✓ Strava (Secretion)
  - 1 - 2 pad
  - 3 – 5 pad
  - 6 – 8 pad

Depending on the amount of strava (Secretion), the sloughed tissue is irrigated by neem water.

- ✓ Eschar
  - Absent
  - Present
- ✓ Hypertrophic Scar
  - Absent
  - Present
- ✓ Gandha (Smell)
  - Absent
  - Present
- ✓ Contracture
  - Absent

- Present

#### **IV. MANAGEMENT**

- ❖ Prevention from source of Heat[8]
  - Stop the burning process and remove any source of heat.
  - Put out the flames with water and smother with a blanket. If the victim's cloths are burning roll the victim on the ground to smother the flames.
  - Remove clothes that are over the burn surface as soon as possible as clothes retain heat. Remember do not pull off the clothes that got stuck to the skin as it may damage the skin.
- ❖ Cold Water Sponging: Immediately after burn, one should keep burn surface under the running cold water or should do cold sponging for at least 1 or 2 hour. Cold water helps to numb the area by cooling it, and it also prevents the skin tissues from further burning.

#### **V. TREATMENT**

Mode of Administration of local application/drug

- ✓ Time-Once or twice a day regular, on the basis of total surface burn area
- ✓ Duration-Up to epithelization
- ✓ Diet-High protein diet specially mentioned in Shashti Upakrama as like pulses, groundnut and easily digestible food (like Daliah, khichdi). Avoid spicy, fried food, sour curd, rajma and urd dal which vitiates "Vata" in the body.
- ✓ Follow Up-First Wound Healer Oil is applied to the affected surface, afterwards powder is sprinkled over there. Apart from application of medicine, it is suggested to the patient to stretch the affected body part to avoid contracture of skin.

#### **VI. RESULTS**

- ✓ Effect on Varna- Wound Healer Oil and Powder provides normal color to the burn wound in 30 days; while provide mild color to the wound in 45 days.
- ✓ Effect on Gandha- Wound Healer Oil and Powder, gives normal smell of burn wound in 12 days while gives normal smell to the wound in 19 days.
- ✓ Effect on Strava- Wound Healer Oil and Powder gives maximum relieve the strava from 14 days while gives relief from strava in 21 days.
- ✓ Effect on Vedana- Symptoms of Vedana is completely relieved by Wound Healer Oil and Powder in 14 days while in ointment, gives complete relief from Vedana not noticed even at the end of 26 days.
- ✓ Effect on Granulation- Granulation occurred on 25th day in experimental group, while in other group it occurs on 35th day.
- ✓ Post Healed Wound Progress- Discoloration, contracture and keloid absolutely not observed in Wound Healer Oil and Powder while in ointment hyper discoloration and contracture is observed while keloid is not seen. Even in case of some extent of 3rd degree burn, our medicine works as miracle in healing the



affected wound.

## **VII. MODE OF ACTION AND DISCUSSION**

- ✓ Due to Snigdha property of Taila prevents dryness of burn wound. It prevents the loss of water from the exposed tissue and prevents infection.
- ✓ Wound healer oil and powder has Ropana property by producing optimal quality of granulation tissue. It has shool shaman property and provides moisture to the burn wound and hence prevents eschar and reduces the pain of burn patient.
- ✓ By using Wound healer oil and powder prevents formation of discoloration, eschar, contracture which gives better cosmetic relief to the patient of burn in comparison of cream and hence today's modern era Wound healer oil and powder Tail may become a choice for the management of burn for early healing property, prevent the infection and cosmetic purpose.

## **VIII. CONCLUSION**

This article is written in order to prevent contracture of skin due to Agnidagdh (Burn). I observed that the wound healer Oil and powder has a good effect than on burn. It is also found that it is better wound healing as compare to . It is also concluded that wound healer oil and powder minimizes pain of patients. It is also revealed that it is used can be also used to prevents eschar formation and contracture. There is usually no hypertrophic scar formation observed. Wound Healer Oil and Powder can be used for better management of burn.

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**Figure No. 4. Treatment Given By Dr. Shikhesh In Case Of Epileptic Patient Burn during Fit By Hot Tea.**