

## A Case Study of Manjistadi Taila with Kadalipatra and Bactigauze for Local Application in the Management of Burn

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**Abstract** Traditional medicines have been used for many countries around the world including South East Asian countries for health care 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 in spite of advance made 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. Ayurvedic medicines got much desired boost for current & emerging challenges, it is crucial that Ayurvedic medicines are beneficial, must play their respective roles in promoting health & preventing or treating diseases. A Burn is an accidental as well as suicidal injury encountered by surgeon in day to day practice. Sushruta is pioneer of Indian surgery. He explained Dagdha (burn) and its management in 12<sup>th</sup> Adhyaya of Sutrasthan. As the patient of Dagdha (Burn) are increasing in the society due to today's stressful & busy life style. The present study entitled "A Case Study of Manjistadi Taila with Kadalipatra and Bactigauze for Local Application in the Management of Burn". Treatments prescribed in modern medicine like chlorhexidine acetate as bactigauze had proved their definite efficacy in the Burn management but they have some limitations like it can't avoid eschar, hypertrophic scar, post burn contracture which harms as a cosmetically. So to overcome these deficiencies we can apply Manjistadi Taila with Kadalipatra as local application in the 1<sup>st</sup> & 2<sup>nd</sup> degree burn. The present case study was conducted on 2 patients as far considered one is control group and other is experimental group. The clinical assessment was done on the basis of grading criteria with specific symptomology of Burn like Vedana (pain), Strava (secretion), Vranavarna (colour), Gandha (smell), eschar, discoloration, hypertrophic scar, and contracture. According to observations and results conclusion has been done.

**Keywords** Burn, Manjishta, Kadalipatra, Bactigauze, Dagdha, Taila

## 1. Introduction

Ayurveda is an ancient science from Vaidic Kala as per Sushruta's Ayurveda Prayojan [1]. Sushruta mentioned that during the treatment of disease or after treating the disease the selected health will be preserved that means prevention of complication as well as recurrence of that disease.

Traditional medicines have been used for many countries around the world including south east Asian countries for health care 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 advance made 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. Ayurvedic medicines got much desired boost for current & emerging challenges, it is crucial that Ayurvedic medicines are beneficial, must play their respective roles in promoting health & preventing or treating diseases.

Ayurveda is Upang of Atharvaveda; this Ayurveda consists of eight branches in which Shalya Tantra is Aadya & Pradhan branch which offers quick & swifter solution for the disease [2]. Acharya Sushruta is a pioneer of surgery & Ayurvedic Shalya Tantra and had explained main importance i.e. Pradhanta of Shalya Tantra [3]. In this way, Acharya Sushruta had explained various important topics long years ago which are explained & developed by modern science nowadays, such as Karna Nasa Oshta Sandhan, Asthavidh Shashra Karma, Asthi Bhagna, Kshar Chikitsa, Agni Dagdha.

Sushrutacharya has been mentioned Agni Dagdha as Pramad Dagdha or Etaratha Dagdha.

This Pramad Dagdha [4] has four types.

- i. Plushtadagdha
- ii. Durdagdha
- iii. Samyakdagdha
- iv. Atidagdha

### i. Plushtadagdha

Plushta is that Dagdha which has a pigmented area on skin associated with severe burning sensation.

### ii. Durdagdha

Dur Dagdha is that Dagdha in which Sphota appears accompanied with severe pain such as sucking, burning with redness and infection. These symptoms subside after a long time.

### iii. Samyakdagdha

Anawagad means wound which are not deep. Talphala Varna means like blue and black in colour, Susamsthit means without elevation or depression.

### iv. Atidagdha

In Atidagdha there are hanging of burnt tissue, parts becomes loose & useless etc.

Sushruta had explained Dagdha Chikista [5] in Sushruta Samhita in Sutrasthan Adhyay 12<sup>th</sup> in which Cold therapy is given by the surgeon in 1<sup>st</sup> & 2<sup>nd</sup> degree burn. 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 Manjistadi Taila with Kadalipatra as local application in the 1<sup>st</sup> & 2<sup>nd</sup> degree burn. As Manjistadi Tail is good for Vranaropan & Kadalipatra is good for Shulshaman and retained moisture which promoted faster wound healing as well as prevent eschar formation, so keeping above points in mind decided to work on this topic.

## 2. Aims and Objective

1. To study the effect of Manjistadi Tail & Kadali patra of burn (1<sup>st</sup> & 2<sup>nd</sup> degree).
2. To study the effect of bactigauze in the management of burn.
3. To study the effect of Manjistadi Tail on eschar hypertrophic scar and contracture.

## 3. Materials and Methods

### 3.1. Manjistadi Tail [6]

#### 3.1.1. Manjista

##### Ayurvedic Aspect [7]

**Name-** Manjista

**Rasa-** Madhur, Tikta

**Virya-** Ushna

**Vipak-** Madhur

**Gun-** Guru

**Doshaghnata-** Tridosha shaman-Inflammatory and Shodhan

##### Modern Aspect [8]

**English Name-** Indian madder

**Latin name-** Rubia cordifolia Kashaya

**Family-** Rubiaceae

**Plant-** Lata

**Systemic Property-** Anti

#### 3.1.2. Taila (TILA)

##### Ayurvedic Aspect [9]

**Name-** Tila Taila

**Rasa-** Madhur, Kashaya

**Virya-** Ushna

**Vipak-** Madhur

**Gun-** Sheet, Vyavayi

## 4. Drug Study

### 4.1. Preparation of Drug

A. **Manjistadi Taila** [10] Manjistadi Taila will be prepared in the pharmacy of S.V.N.H.T's Ayurved College, Rahuri Factory as per the common method of Taila preparation mentioned in Sharangdhar Samhita.

B. **Kadali Patra** [11] It will be collected from herbal garden of respective college.

C. **Bactigauze** Adheshwar Meditex Pvt. Ltd. Pharma

## 5. Methods

A. **Consent** An informed written consent will be obtained from every patient before including in the study.

B. **Research Proforma** After registration of the patient for research study specially prepared research proforma will be filling up with respect to history, physical and clinical examination and investigations.

C. **No. of Patients** Total 02 patients will be selected & divided into two groups.

### Group A Experimental Group

01 patient will be treated with irrigation of normal saline followed by local application of Manjistadi Taila with Kadali Patra.

### Group B Control Group

01 patient will be treated with irrigation of normal saline followed by local application of chlorhexidine as Bactigauze

Trade Name Bactigauze

Adheshwar Meditex PVT. LTD. Pharma

All patients will be subjected to routine investigations and treatments.

### 1} Investigations

CBC, BSL random, BT CT, Urine Routine, HIV

### 2} Treatments

Antibiotic- tab. Moxikind CV 625 {Amoxycillin trihydrate 500mg+ potassium clavulanate 125mg} {Mankind pharmacy} 1BD for 5 days

Anti-inflammatory- tab. Flozen AA {aceclofenac 100mg paracetamol 325mg serratiopeptidase 15mg} {Discovery division of mankind pharma} 1BD for 5 days.

Antacid- cap. Oscar 20 {omeprazole 20mg} {Lifestar pharma} 1BD for 5 days.

### A. Place of Work

Shalya Tantra Department and IPD/OPD of SVNHT's Ayurved Mahavidhyalaya, Shri Shivaji Nagar, Rahuri, Dist- Ahmednagar.

### B. Mode of Administration

**Time**-Once a day regular

**Duration**-Up to epithelization

**Diet**-High protein diet specially mentioned in Shashti Upakrama as like pulses, groundnut, cashew Nut, almonds and palm dates.

**Follow Up**-0 day, 3<sup>rd</sup> day, 5<sup>th</sup> day, 7<sup>th</sup> day, 10<sup>th</sup> day, 15<sup>th</sup> day, 21<sup>st</sup> day, 30<sup>th</sup> Days, 37<sup>th</sup> Days, 45<sup>th</sup> Days.

### C. Selection Criteria

#### Inclusive

Patient having up to 15% burn,  
 1<sup>st</sup> & 2<sup>nd</sup> degree burn,  
 Age group- 18-60 yrs.  
 Irrespective of sex & occupation,  
 Burn due to heat including dry & moist,  
 Within 48 hr. burn,  
 Upper & lower extremities.

#### Exclusive

Patient having more than 15% burn,  
 3<sup>rd</sup> degree burn. (*Sira, Snayu, Asthi, Sandhi, Dagdha*)  
 Diabetes,  
 HIV,  
 Hepatitis B,  
 Age group Less than 18 years & more than 60 years,  
 Hb% below 8 gm/dl,  
 Electrical, chemical, frost and radiation burn,  
 Toxemia,  
 Septicemia,  
 Burn after 48 hrs.  
 Head, neck, thorax, abdomen, genital organ.

### D. Observations

#### 1. Vedana (Pain )

- O No pain
- I Pain on exaggeration
- II Pain on slight movement
- III Continues pain

#### 2. Vranavarna (Colour)

- O Pinkish red
- I Normal reddish colour
- II Whitish yellow colour
- III Yellow slough formation

#### 3. Strava (Secretion)

- O 1-2 pad
- I 3-5 pad
- II 6-8 pad
- III 9-11pad

#### 4. Gandha (Smell)

- O Absent
- I Present

#### 5. Eschar

- O Absent
- I Present

#### 6. Hypertrophic Scar

- O Absent

I Present

## 7. Contracture

O Absent

I Present

## 6. Results

Effect on Varna- Manjistadi Tail and Kadalipatra provides normal colour to the burn wound in 30 days; while bactigauze provide mild colour to the wound in 45 days.

Effect on Gandha- Manjistadi Tail and Kadalipatra, gives normal smell of burn wound in 12 days while bactigauze gives normal smell to the wound in 19 days.

Effect on Strava- Manjistadi Tail and Kadalipatra gives complete relieve the strava from 14 days while bactigauze gives relief from strava in 21 days.

Effect on Vedana- Symptoms of Vedana is completely relieved by Manjistadi Tail and Kadalipatra in 17 days while in bactigauze group, complete relief from Vedana not noticed even at the end of 26 days.

Effect on Granulation- Granulation occurred on 27<sup>th</sup> day in experimental group, while in control group it occurs on 35<sup>th</sup> day.

### Post Healed Wound Progress

Discoloration, contracture and keloid absolutely not observed in Manjistadi Tail and Kadalipatra while in bactigauze hyperdiscolouration and contracture is observed but keloid is not seen.

## 7. Mode of Action & 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.

Manjistadi Tail has Ropana property by producing optimal quality of granulation tissue. Kadalipatra has shool shaman property and provides moisture to the burn wound and hence prevents eschar and reduces the pain of burn patient.

By using Manjistadi Tail and Kadalipatra prevents formation of discoloration, eschar, contracture which gives better cosmetic relief to the patient of burn in comparison of bactigauze and hence today's modern era Manjistadi Taila and Kadalipatra may become a choice for the management of burn for early healing property, prevent the infection and cosmetic purpose.

## 8. Conclusion

- Manjistadi Tail and Kadali patra has a good effect than bactigauze on burn.
- Manjistadi Tail and Kadali patra has better wound healing as compare to Bactigauze.
- Manjistadi Tail and Kadali patra minimizes pain.
- Manjistadi Tail and Kadali patra prevents eschar formation.
- No hypertrophic scar formation observed.
- Manjistadi Tail and Kadali patra prevents contracture.

- g. Manjistadi Tail and Kadali patra can be used for better management of burn.
- h. Present case study will be opens the new research path in modern surgical practices.

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