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Case Study

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## APPLICATION OF SHATADHAUTA GHRITA IN BURN -A CASE STUDY

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#### **ABSTRACT**

The highest incidence of Burn occurs in children younger than 5yrs. Childrens at high risk are those of lower social economic status and of single parent. Most pediatric burns are small and can be managed in nonspecialist centers. The majority of burns in children are scalds caused by accidents with the kettles, pans, hot drinks, and hot bath water. In Ayurveda description of Agni dagdha vrana is comparable to the burn wound. The present case i.e 2<sup>nd</sup> degree burn of 6yr old child is successfully treated with ayurvedic formulations i.e Application of Shatadhauta Ghrita for 2 to 3weeks. The wound healing was satisfactory. No such complications developed.

- **KEYWORDS:** Agnidagdha vrana, Shatadhauta Ghrita, Burn.
- **❖ INTRODUCTION**

Burn defined as a wound in which there is coagulative necrosis of the

tissue, caused by heat, cold, electricity, chemicals, friction or ultraviolet radiation.

Burns in children are major problem across the globe. Thermal burns occur when some or all of the cells in the skin or other tissue are destroyed by hot liquid (Scalds), hot solids (Contact burn), flames.<sup>[1]</sup> The scald type of burn is a most common type of injury under the age of 5 to 9 years accounting for over 65% of cases.<sup>[2]</sup>

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Burns are divided into 3 types First degree burn (Superficial), Second degree burn

(Superficial partial thickness and deep partial thickness), Third degree burn (Full

thickness).[3]

Ayurveda describes burn injury as agni dagdha vrana. Acharya Sushruta has elaborately

described the Bhedha (Types), Lakshanas (Clinical Features), Chikitsa (Treatment) Principles

and Upadrava (Complication) of Dagdha Vrana (Burn Injury) in the context of Agnikarma

(Cauterization) chapter. [4] Acharya Caraka has mentioned burn wound as Agantuja Vrana in

Dhwivraneeya Adhyaya.<sup>[5]</sup>

Agnidagdham Durdagdha presents with lakshanas as Uthistha, Sphota, Thivrachosha, Daha,

Raaga, Paka, Vedana, Chira Upashamyanti. [6] Among these the type of durdagdha has similar

lakshanas to that of the second degree burn for which the treatment with external application

using Ghrita, lepa, Seka and cold application is advised. [7]

Here, we present a successfully managed Second degree burn case with Ayurvedic

Formulations.

CASE REPORT

A 6yr old girl child name: Akshata D/O Abhraham brought by her parents to shalya tantra opd

with complaining of burns in her both thighs and external genital region due to accidental

pouring of hot water by herself. Associated with severe burning sensation and pain.

❖ Diagnostic assessment: Clinical sign and symptoms of Durdagdha includes sphota

(Blister), teevradaha, teevraraga, and teervapaka were observed. The severity of the burn

is assessed by lund and browder rule.8 On examination of the child it was second degree

burn with a <10% TBSA.

Personal history

Diet: Mixed

Appetite: Regular

Bowel: Once a day, Normal

Micturition: 4-5 times

Sleep: Disturbed

• General examination

GC: Fair

Pallor: Absent Icterus: Absent Cynosis: Absent Edema: Absent

#### Vitals

BP: 110/70 mmhg

PR: 89 bpm, regular

Temperature: Afebrile, 97.4<sup>o</sup> F

RR: 19/ min

#### • Systemic examination

• CVS: S1S2 heard.

• CNS: Conscious, oriented to time, place and person.

• P/A: Soft, non-tender

• RS: Bilateral equal air entry, Normal vesicular breath sounds, no added sounds present

#### • Wound examination

- Location of burn, antero-medial aspect of B/L thighs, small patch of burns in genital area.
- Size: Approximately 18-20 cm x 10cm (on each theigh) & about 4cm x 3cm in genital region.
- Degree of burn Second degree burn
- Percentage of burns 10% of total body surface according to pediatric burn guidelines.

#### • Investigations

Hb: 9.4%

TC: 10, 300 cells/cmm

ESR: 46 mm/hr

RBS: 80.6 mg/dl

Sr. Creatinine: 0.7 mg/dl

Blood urea: 4.0 mg/dl

Sodium: 142 mmol/l

Potassium: 5.1 mmol/l

Chloride: 101.6 mmol/l

**Final diagnosis:** Dagdhavrana - Second degree burns 34%.

#### **\*** Timeline and Therapeutic intervention

The burn wound was treated with ayurvedic Bahya and Abhyantara treatment such as oral shaman aushadhi, lepa.

Wound was cleaned with sterile cotton followed by external application of shatadhauta ghrita 2 times in a day.

Orally Septilline Syrup 5ml TID after food was advised.

The wound was kept open and care was taken not to expose it to dirt throughout the treatment period.

❖ Pathya and Apathya: Advised to give laghu and kavoshna (lukewarm)food, rice with green gram gruel, vegetables, tender coconut, and lukewarm water for drinking to the patient. It was advised to avoid curd, spicy food, junk food, meat, paultry and sour food atomes.

It was also advised for sponge bath cautiously excluding wonded parts.

Mother was cautioned to keep the wounded area healthy throught the day.

#### Follow-UP & Outcome

Wound cleaning followed by Shatadhauta Ghrita application 2 times a day.

After application of Shatadhauta Ghrita burning sensation and pain was reduced.

On 2<sup>nd</sup> week wound was dry, oedema and redness was reduced. The wound was completely in healthy stage after 3<sup>rd</sup> week and normal pigmentation over healed wound was observed.

#### **DISCUSSION**

Shatadhauta Ghrita is prepared by washing the Ghrita in water for 100 times & it is prescribed for the treatment of wounds, burns and many other skin lessions.<sup>[8]</sup> Usaually it takes about 3 to 4 weeks of time for the Second degree burn to heal, but in the present study wound were found to heal within 15-20 days suggesting that Shatadhauta Ghrita pays a major role in the treatment of Second degree burn. It is economic to use, widely available, more

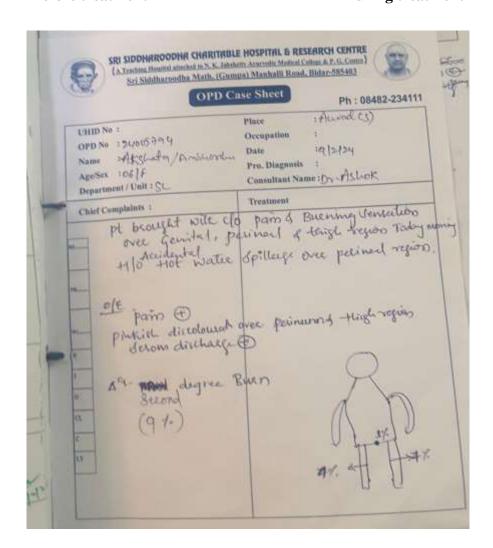
potent and acceptable in treating burn cases comparitively contemporary medicine costs the earth, with long hospitalisation. Hence use of shatadhauta ghrita should be implemented as a line of treatment in burn in day to day practises.





**Before treatment** 

**During treatment** 





After treatment

#### \* CONCLUSION

Management of pediatric burn poses a major challenge to Ayurvedic treatment as it involves presuding a highly stressed family and handling a scared child. Use of Shatadhauta Ghrita shown good result in early healing, epithelisation, preventing contracture reducing scar mark and fast healing.

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