

Egg Yolk Basti – A Boon to Heal Accidental Burn Wound

Dr. Dharmesh Chauhan^{1*}, Dr Hemant Toshikhane², Dr. Harish Daga³, Dr. Varsha Chaudhary⁴

^{1*}Assistant Professor, Department of RSBK, Parul Institute of Ayurveda, Vadodara, Gujarat.

²Dean and Principal, Faculty of Ayurveda, Parul Institute of Ayurveda, Vadodara, Gujarat.

³Associate Professor, Department of Shalya Tantra Parul Institute of Ayurveda, Vadodara, Gujarat

⁴Post Graduate Scholar, Department of Shalya Tantra Parul Institute of Ayurveda, Vadodara, Gujarat.

***Corresponding Author-**

Dr Dharmesh Chauhan^{1*}

^{1*}Assistant Professor, Department of RSBK, Parul Institute of Ayurveda, Vadodara, Gujarat.

Email: ^{1*}drdharmesh16@gmail.com

Abstract: Burn injuries are frequent, horrifying, and life-threatening conditions that are still challenging to cure. Complications like scarring, keloid formation, and contractures are the main challenges for the treating surgeon. Burn injuries can occur from fire, moist heat, electrical source, chemical agents, radiations, etc. The Ayurvedic classics explain different treatment modalities for the management of burn wounds. In this case study, A Case of 54 years old male patient came to OPD of Shalyatantra Department Parul institute of Ayurveda with complains of accidental burn injury, wound over right foot and burning pain over right leg. In past history we have found that patient burned from hot liquid before 15 days. He had taken contemporary medicines and iv fluids for Initial Management. Treatment protocol given for this patient is wound care, debridement and wound healing. Wound healing was promoted with the help of nutrient enemata in the form of egg yolk basti. Document supports that the absorptive capacity of the colonic mucosa could be used to provide partial nutrition who at present require central lines for intravenous feeding. This would avoid the many metabolic, infective, and technical complications associated with the parenteral route.

Keywords: Accidental Burn Injury, Dagdha, Ropana, Basti, Egg Yolk Basti, Nutrient Enemata.

1. Introduction

In India, an estimated million cases of mild to severe burns are reported each year. Burn injuries are typically 86% thermal in origin, 4% electrical, and 3% chemical in nature. Burn injuries are more common in low- and middle-income people. Standard guidelines for managing burns include fluid resuscitation, airway preservation, analgesics, broad-spectrum antibiotics, nutritional support, escharotomy, fasciotomy, skin grafting, and tetanus prophylaxis. Topical applications, such as silver sulfadiazine, silver nitrate gel/solution, and fusidic acid, form the foundation of burn wound care. Burns are injuries of the skin involving the two main layers - The thin outer epidermis and the thicker deeper dermis. one of coagulation that is in intimate contact with the aggressor agent and where immediate necrosis of the tissue occurs with denaturation of proteins and Release of molecular patterns associated with damage, the area of stasis is peripheral to the one described above and this one retains its blood flow which according to water resuscitation has a 50% chance of surviving. Wound healing was promoted with the help of nutrient enemata in the form of egg yolk basti. Document supports that the absorptive capacity of the colonic mucosa could be used to provide partial nutrition who at present require central lines for intravenous feeding. This would avoid the many metabolic, infective, and technical complications associated with the parenteral route.

Extent of the Burn

Several methods are available to estimate the percentage of total body surface area burned.

Rule of Nines - The head represents 9%, each arm is 9%, the anterior chest and abdomen are 18%, the posterior chest and back are 18%, each leg is 18%, and the perineum is 1%. For children, the head is 18%, and the legs are 13.5% each.

Case Report

A Case of 54 years old Male patient came to OPD of *shalyatantra* department Parul institute of *Ayurveda* with complains of accidental burn injury before 15 days, wound over right foot and burning pain over right leg. In past history we have found that patient burned from hot liquid before 15 days. He had taken allopathic medicines and iv fluids. Patient was non k/c/o DM/ HTN.

General Examination

- BP-130/80 MM OF HG
- PULSE-82/MIN
- TEMP-98.8 F
- SPO2- 98%

Examination of the local part:

Table 1. Inspection:

Discoloration	Present
Ulceration	present
Sign of gangrene	Absent
Pus discharge	Mild
Degree of burn	3 rd degree

Table 2. Palpation:

Arterial Pulse:	Present
Dorsalis Pedis	Present
Tibialis posterior	Present
Popliteal	Present
Femoral	Present
Sensation	Present
Local Coldness	Present

Investigations:

Table 3. Hemogram Examination

Hb	8.9 g/dl
Total RBC count	3.01 mill/cmm
Total WBC Count	13100// cmm
PCV	24.7%
MCV	69.25 Femtolitre
Polymorph	98%
Lymphocyte	05%
Platelet Count	262000/cmm

Table 4. Urine Examination

Color	Reddish
Blood	absent
Appearance	Hazy.
Protein	Absent
Glucose	Absent
Pus cell	3-5 /H.P. F
Red cell	4-6 / H.P. F

Table 5. Blood sugar

RBS	100 mg/dL
HBA1C	5%

Estimated Average glucose	104 mg/dl
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Diagnosis:

The diagnosis was done on the signs, symptoms, and clinical examination. It was diagnosed as an accidental burn injury with a TBSA of 18% for the third degree (affect all layers of skin and some deeper tissue appears white). In *Ayurveda*, it was diagnosed as *Plushta* and *Durdagdha*, and treatment was planned accordingly.

Table 06: Sapeksh Nidan

Provisional Diagnosis- Burn injury
Differential Diagnosis- Chemical injury
Diagnosis- Burn injury (Durdagdha)
Prognosis- Kriccha sadhya

Figure 01: Before Treatment**Treatment Protocol****1. Wound care**

- Panchavalkal kwath praksalan
- Alovera for local application in burning management
- Rason tila kalka local application in the management of Puti Gandha
- Yavaksara local application for slough removal

2. Debridement**3. Saman chikitsa (symptomatic management)**

- Tab Triphala Gugulu 2-0-2 with luke warm water
- Gandhak rasayan 2-2-2 with luke warm water
- Chandraprabha Vati 2-0-2 with luke warm water
- Eladi vati 2-0-2 with luke warm water
- Egg Yolk Basti – In each sitting two organic egg were taken with half TSF of honey and one pinch of rock salt in preparation of that mixture in the form of basti it was administered following protocol of Matra Basti till the healing of wound.

Figure 02: Alovera for Dressing

Figure 03 Lower Limb Lateral, Anterior And Medial View During Treatment



Figure 04 Lower Limb Lateral, Anterior And Medial View Healing Started (After Week)



Figure 05 Lower Limb Lateral, Anterior and Medial View Healing Started (After 2week)



Figure 06 Lower Limb Lateral, Anterior And Medial View Healing Started (After 2week)



Table No: 13 Observation and Results

S.N.	Symptoms	Before Treatment	After Treatment
1	Burning pain pain (VAS SCALE)	9	0
2	Foul smell	Present	Absent
3	Discharge	Present	absent
4	Peripheral pulses	Present	Present
5	Wound	Non healing	healed

2. Discussion

Guggulu is one extraordinary drug that possesses *Anabhishyandhi*, *Snigdha*, and *Sroto Shuhdhikara*. Tab. *Gandhaka rasayana* is having *yogavahi guna*. *Gandhaka* as main ingredient and many *bhavana dravyas* it is *raktaprasadaka*, *pittaghna*, *dahashamaka* and *rasayana*. **Aloe Vera Gel** can not only increase the amount of collagen in wounds but also change the composition of collagen, increase collagen cross-linking and thereby promote wound healing. Scientific studies have shown that the gel can increase the flexibility and reduce the fragility of the skin since 99% of the gel is water. **Egg yolk Basti** have a significant role in management of protein loss. In the proliferative and remodeling phases, protein-energy deficiency may also decrease fibroblast activity, delaying angiogenesis and reducing collagen formation. Moreover, protein-calorie deficiency is also associated with weight loss and decreased lean body mass.

3. Conclusion

Knowledge of pathogenesis and Complications of a disease according to Ayurveda and Modern science is necessary for proper planning of the treatment. In an attempt to treat burn on the principles of ayurveda where Wound care, Saman chikitsa (symptomatic management), **Debridement**, management of protein loss knowledge is must. With the success, it can concluded that the pain, Discharge from wound can be effectively managed and affected limb can be saved. Pain, Discharge from the wound absent after treatment and Life style of patient markedly improved as Patient can walk now and do daily work.

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Conflict of Interest – There is no conflict of interest.

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