# **Role of JIPMER Proforma in Burns Management**

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#### Abstract

*Background:* Burns is one of the most common types of injury irrespective of age group, gender, socio-economic status. Treatment of each patient must be individualized. Initial treatment of acute injury has direct bearing over the mortality or morbidity of the patient.

*Methods:* This is a descriptive study in which seven residents involved in the treatment of burns patients were handed over burns proforma to aid in decision making and their responses were analysed.

Keyword: Burns; Proforma; Burns Management.

#### **INTRODUCTION**

Burns is the fourth most common type of injury worldwide, following road traffic accidents, falls and interpersonal violence. Flames, scalds, and electrical burns are the top three causes of severe burns in most studies.<sup>1,2</sup> These occur in regions that generally lack the infrastructure to reduce the incidence and severity of burns. Burns is globally recognized as a challenge for burn care specialists since the impairment caused in different

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Received on: 23.05.2023 Accepted on: 25.06.2023 organ systems will result in a deeper and more severe burn injury.<sup>3</sup> The successful treatment of burn injury involves the time of presentation, with or with out inhalational injury, early recognition of the severity of burn injury, accurate assessment of the area of burn injury, the degree of burn injury, adequacy of fluid resuscitation and recognition of signs of organ failure and direct treatment accordingly.<sup>6</sup> Assessing these vital parameters is essential for tailored management of the patient and constant monitoring of such patients is crucial.

### MATERIALS AND METHODS

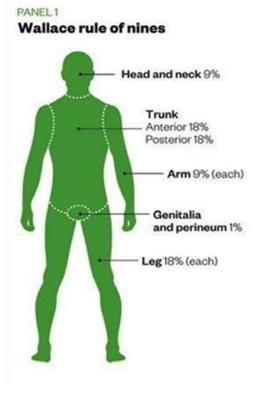
In this descriptive study, conducted at Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), ten residents involved in burns care were recruited and burn proforma modified based on World Health Organization (WHO) and international society of burn injury guidelines were handed over to each patient admitted and participants were required to fill the proforma.<sup>4</sup> The study effectiveness of burns proforma was analysed. (Fig. 1)

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Department of Plastic Surgery Burnsicu - Jipmer, Puducherry	DiabetesCADCKDCLDHypertensionCVACOPDPTB
Patient Details	Allergies:
Name: (Married/Unmarried)	Previous Similar Suicidal Incidents:
Age:	PsychiatricI llness:
Gender:	Others:
Address:	Gynaecological History:(Female)
Occupation:	Immunization history:
Educational Status:	Developmental history:
Informant:	Family History:
Chief Complaints:	Married since
History of Presenting Illness:	Personal History:
Alleged History of (Accidental/Self Intentional)	Diet:
Burn Injury By	Addictive Habits:
Fire Flame: Hot Liquids/Electrical (Domestic/	General examination:
Industrial) Others (Mention)	Airway:
Date of Injury:	Respiratory rate:
Time of Injury:	Blood pressure:
Place of Injury: (Home/workplace) mention	Pulse rate:
details:	SPO,:
Environment: Indoor/Outdoor	GCS:
Person Accompanied the Patient at the Time of	Blood Sugar:
Burn:	Systemic Examination
Dress worn during the time of burns:	Cardiovascular system:
Time For Which the Patient was Burned before the Fire was put down: Fire Was Put Down by Water/ Gunny Bag/ Roll Over and by Whom:	Heart sounds:
	Peripheral pulses:
Involvement of Burns:	Any added sounds:
Burns Involving the Head and Neck/ Chest Wall	Respiratory System:
/Axilla /Abdomen /Back /Upper Limb (Arm/ Forearm/ Hand) /Gluteal Region/ Perineum/	Tracheal position:
Genitals/Lower Limb(Thigh/ Lower Leg/Foot)	Chest expansion:
Associated Smoke Inhalational Injury:	Bilateral air entry:
Associated Trauma:	<u>Central nervous system:</u>
Eye/Ear/Fracture Bones/ Head Injury/Chest/	Bilateral pupil:
Abdomen/Spinal Cord Injury Pain Score at Time	Movements of limbs:
of Admission:	Sensation of limbs:
0 - 10 (Mention)	Spinal examination:
Initial Treatment History:	Head and neck:
Delay In Transport to JIPMER:	Ear
Last Meal Time:	Nose
Past History:	

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Local examination

Eyes

Lips

Neck

# Diagnosis:

# Orders

- 1. Intubation
- 2. Central line insertion
- 3. Venous cut down
- 4. Catheterization
- 5. Wound Irrigation/Dressing
- 6. EMSOT Calls lip for any emergency procedure
- 7. Reserve Blood
- 8. TPR/BP/Input/out put Chart/SPO, chart
- 9. Blood sugar chart
- 10. Nasal O<sub>2</sub>
- 11. Feeds (NPO/Ryle tube/or al Feeds)
- 12. IV fluids
- 13. Analgesics
- 14. Antibiotics
- 15. Parenteral nutrition
- 16. Supplements

# Investigations

- 1. CBC/Buse/Lft/Serology/Crossmatch-Bloodgp
- 2. Chestxray/ECG
- 3. CKMB/Urinemyoglobin/CRP
- 4. Blood culture/Exudateculture
- 5. Urineroutine/Culture
- 6. CT

# Consultations:

- 1. Pulmonology consultation
- 2. CCU consultation
- 3. Paediatric consultation
- 4. ENT consultation
- 5. Ophthalmology consultation
- 6. Dietician consultation
- 7. PMRC Consultation

Date:

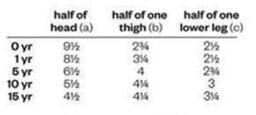
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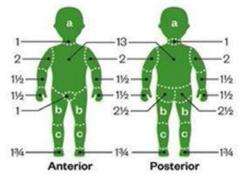
The MRD,

Kindly in timate police and arrange for dying declaration for the patient.

Lund and Browder chart

Relative percentage of body surface area (% BSA) affected by growth





Yours Sincerely,

### RESULTS

All ten residents felt that it's very useful in the management of a patient with significant changes in outcome and would like that it should be implemented in the patient management system.<sup>5</sup> The only drawback mentioned by three residents was that it is time consuming.

### DISCUSSION

Though burn injuries are relatively common in our country their assessment and documentation are not up to the standards. The comprehensive proforma used in burns patients includes all the data's which makes the monitoring and treatment easy. Assessing the weight of the patient plays a vital role in fluid resuscitation calculation. But weighing burns patients is usually missed in general set up so weight was included in the proforma.7 Treatment and prognosis of the patient highly depend on the total body surface area. Surface area assessment is based on Lund Browder chart for accurate assessment during admission and reassessment after 24-48 hours.9,10,11 Body surface area is depicted in picture format to make it easily accessible. Investigation chart is included in the proforma itself and the course of change during stay in hospital can also be known seeing the investigation chart.8 Venous thromboembolism occurs commonly in burns patients due to prolonged stay in hospital. Caprini risk assessment tool is used in the proforma for early detection and risk assessment of thromboembolism. Malnutrition is another common problem encountered by burns patients. So, malnutrition universal screening tool (MUST) score is included in the proforma for calculating malnutrition risk and treatment. Poor documentation of burn injuries may have medicolegal implications especially in homicidal, work spot injury etc.12 Time delay associated with transportation, inadequate fluid resuscitation associated with sub-optimal first aid is also recognized and documented for future reference and medico-legal implications.

## CONCLUSION

Burns proforma helps in diagnosis, guides

management, anticipate complications, and improves patient management.

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