



Case Report

A case report on burn injuries as a result of child abuse and neglect

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ABSTRACT

Neglect and child abuse are serious issues for public health. The high frequency of child abuse and neglect is caused by a number of reasons, including poverty, social inequality, a lack of knowledge, and a lack of reporting procedures. In this case study, a 2-year-old female kid is described with severe physical abuse and neglect-related burns covering her lower back, thigh, and buttocks, totaling around 35 percent of her body. Five hours after the injury, the parents took their child to the hospital.

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1. Introduction

The World Health Organisation (WHO) estimates that burn injuries cause more than 300,000 fatalities annually. A youngster dies from burn injuries anywhere on the globe once every five minutes, since about a third of fatalities are in people under the age of 20.¹

Children between the ages of 1 and 4 are most frequently affected by scald injuries from hot liquids, which account for the bulk of burn injuries in kids.

Electric burns, chemical burns, and intentional burns are further types of burns. Knowing the risk factors and characteristics of intentional harm and looking for them are important steps, and the history, physical examination, and typical patterns of presentation can all provide important hints.²

Intentional immersion burns are evidence of physical abuse and neglect by the parents in this case. Early detection, evaluation of the child's physical and mental health, and reporting of such situations are required.

2. Case Report

A patient named Ragini, a 2-year-old female child, was brought to the emergency department of Sarojini Naidu Medical College, Agra, on Tuesday, February 25, 2023, at 2:10 p.m. with an alleged history of accidental thermal burn (scald) due to spillage of hot tea on Tuesday, February 25, 2023, at 9:00 a.m.

Patient was examined clinically and investigated accordingly. The findings were inconsistent with accidental burns as per the history given by the parents and raised the suspicion of child abuse.

3. Results

On examination, it is an epidermal burn or first-degree burn case based on the degrees of burn classification given by Wilson.³ It is a superficial burn and is very painful. The affected areas are erythematous. The upper layer of skin (epidermis) is peeled off and lost. There is a line of redness seen around the injured areas. Small, fluid-filled blisters are present over the lower abdomen, perineum, leg, and foot.

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3.1. Burn areas include

More than half of the trunk region (13%)

Smaller area of blisters is seen in the lower abdominal region and perineum (1%)

Anterior one-third and medial aspect of thigh: 5%

Whole of the buttocks: 4%

Posterior aspect of both the thighs: 7%

Some part of the leg and foot: 2%

Total body surface area involved is approximately 32% (Figure 1), which is estimated based on Lund and Browder's method of classification for children in the age range of 1-4 years.³

Scald burns were associated with peeling of the skin and redness, and there is no history of fever.



Fig. 1: Shows burn area over the body approximately 32% of total body surface area involved.

The patient was managed conservatively with regular dressings, intravenous fluids, antibiotics, and pain killers.

4. Discussion

Social and family history reveals a number of factors that contribute to child abuse, such as the following: The parents are uneducated; the father is a daily wage worker and comes from a lower socioeconomic status; the family has three girls (5 years old, 2 years old, and 7 years old), and this case discusses the abuse of the middle child; the parents are unhappy and angry about having only girls and no male child; there is a history of repeated beating of children; and there is a history of child abuse.

Accidental burns from coming into contact with hot liquids typically form a patchy burn pattern with several splash marks. Immersion burns feature boundaries between burned and unburned skin that are well-defined and are of uniform depth. Scald burns to the lower extremities and perineum should raise the possibility of intentional damage brought on by submersion in a hot liquid. Due to the child's joints being held in flexion as a consequence of fear, discomfort, or rage while they are submerged in the hot liquid, immersion burns generally have a flexion burn pattern, which results in areas of scabbing.⁴

A history of child maltreatment or neglect as a child, a lack of social supports or social isolation, adolescent or young parenthood, mental illness, depression, developmental delays, substance abuse, domestic violence, poverty, unemployment, and low education are all risk factors for parental or carer abuse of children.⁴

To stop child abuse and lessen its effects on children's physical and emotional health, early detection and intervention are essential.

It's crucial to distinguish between accidental burns and negligence if you want to avoid further harm. Hence, a comprehensive history, a thorough clinical evaluation, and a wider consideration of the social and historical context are needed.⁵

5. Conclusion

If abuse is suspected, thorough investigations are necessary, including a skeletal survey in children under the age of two, consideration of cranial neuroimaging in younger infants, and perhaps a scene evaluation.¹

Children may avoid any and all stimuli that remind them of the burn event as a result of being subjected to the trauma of abuse and the burn incident, and they may also develop psychiatric problems like anxiety, depression, and stress disorder.²

The primary care provider can support prompt identification and reporting of physical abuse as well as necessary medical and mental health care. A key element of the care plan for children and adults who have experienced physical abuse should be mental health counselling.⁴

No matter how severe the burn, hospitalisation must be advised in the event of probable abuse or neglect. For these patients, assistance from social services and educational initiatives emphasising primary prevention and addressing family members is necessary.⁶

The law requires every citizen to report such incidents, and the identity of the person reporting is kept confidential.

The NGO's must be informed, as must the child protective services organisations and law enforcement personnel. Failure to report crimes results in ongoing victimisation. To decrease the damage and eliminate threats in the future, we should take action. Realise that a child

could be in danger of more abuse.

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None.

7. Conflict of Interest

None.

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