

## A Statistical Analysis of Post Burn Flexion Deformities in Kashmir

C. N. Malla\* Nancy Malla\*\* B. M. Bhan\*\*\*

**A** statistical study of 1500 cases with various reconstructive problems was made by us in last three years at SMHS. Hospital, Srinagar which receives patients from all over the Kashmir. Out of these, 36.5 per cent of cases (Muslims—87.3% and Hindus 12.3%) presented with post-burn contractures of various regions of the body.

Our series does not include cases with fresh burns or those with post burn hypertrophic scars.

### Discussion :

It is difficult to estimate the incidence of burn cases since majority of them having received minor burns or post burn contractures, do not receive medical attention (Converse, 1959). Apart from this, lack of transport facilities in far flung areas of Kashmir or extreme poverty or lack of awareness regarding medical facilities available prevent them from availing medical facilities.

Converse (1969) observed that the incidence of burns and their distribution according to age and sex are directly proportion to the etiological factors. Where the

majority of burns occur in domestic accidents, children under 10 years and women predominate.

Our analysis by sex revealed predominance of females 57.2% over males 42.8% (including children of both sexes). Infants under one year comprised only 3%. Children under 10 years in his study of 100 cases comprised 36 per cent and children under one year 2 per cent (Table 1).

Table 1—Showing incidence according to Age Groups :

S. No.	Age	Percentage
1	Below 10 years	48%
2	11-20 years	33%
3	21-30 years	16%
4	Above 30 years	2%

The Kangri was the cause of burn leading to post burn contracture deformities in 95 per cent of cases while only 5 per cent of contractures resulted either due to electricity or Diesel burns. Later case were bus conductors. They got burns

\* Lecturer in Plastic Surgery, Govt. Medical College, Srinagar.

\*\* Demonstrator in Microbiology, Medical College, Srinagar.

\*\*\* Professor and Head of the Deptt. of Surgery, Medical College, Srinagar—Kashmir.  
Paper read at XI summer Conference of Plastic Surgery held at Srinagar June, 1976.

when diesel caught fire during winter months in Kashmir.

A seasonal study revealed the incidence to be higher during winter. Kangri the main cause of burns is a portable heater carried by Kashmiris under huge woolen shirt called Phiran for warming themselves during winter months. It consists of a inner earthen pot in which live charcoal (soft coke and hot ashes) are used. This pot is surrounded by a basket frame work which forms the sides and roof; later acts as a handle also.

While analysing the incidence of post burn contractures according to parts involved, it was observed that hands were affected in 39.7 per cent cases while neck and groins comprise 12.3 per cent (Table 2).

Table 2.

S No.	Region	Per-centage	SNo.	Region	Per-centage
1	Hands	39.7	4	Axilla	9.5
2	Neck	12.3	5	Cubital fossa	6.8
3	Groin	12.3	6	Popliteal fossa	6.8

History revealed that hands and groins got burnt when clothes caught fire during sleep while Kangri was taken to bed along-with. Hands also got burnt while fighting fire or when they slipped into Kangri during sleep. Children got burnt either when they slipped on snow alongwith Kangri, hands being trapped in Phiran or when they tried to light charcoal in the Kangri with the help of Kerosene. All of our patient were from lower and middle income groups probably because more affluent use iron stoves or electric heaters.

Epileptics comprising 6 per cent got burns during a fit when they could not get rid of Kangri.

### Summary

A statistical analysis of post burn contractures was made with a view to find out the etiology and mechanism of post burn contractures,

### REFERENCE

- Converse, J. M. : Scars and Keloids. Reconstructive Plastic Surg., W. B. Saunders Co., London, Page 161, 1969.