

## The care of the limb deficient child in India

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### **Abstract**

The problem of treating limb deficient children in India is compounded by many factors, social, cultural and economic. Few attend early and most therefore manage without prosthetic care.

### **Introduction**

India is a vast country. More than 80% of its population live in inaccessible rural areas. There is marked diversity in culture, religion, education and awareness amongst the population. But since 1981, the "Year of the Disabled", there has been a growing concern about the disabled population in the country. Till today a lack of awareness amongst the treating surgeons and the limb deficient patients has further complicated the problem. Even those children who have been provided with orthoses and prostheses are not using them regularly. Is this because the population is ignorant and do not realise what is good for them, as is being affirmed by many specialists, or is there a possibility that the appliances are not suitably designed for them? If the appliance actually helps, it would certainly be used. After all it is the user who knows best what is good for him or her.

### **Rehabilitation of limb deficient children**

In India mostly limb deficient children do not reach the rehabilitation institutions early with the result that they adjust themselves in such a way that they can perform most activities. Social, cultural and economic constraints restrict the use of surgery to the correction of deformities. By the time they reach an

institution they are grown up and unwilling to undergo surgical corrections.

Designs of aids for limb deficient children is a very complex business. It not only calls for a more scientific approach but a much better understanding of Indian Society, its culture, its gross economic disparities and its stratified structure. Any solution needs to be cost effective.

At the Rehabilitation and Artificial Limb Centre, Department of Physical Medicine and Rehabilitation, Lucknow 11,590 new cases attended the outpatient department in 1989. Out of these only 36 cases had limb deficiencies present at birth while more than twice that were of other musculoskeletal anomalies present at birth. Lower limb deficient patients were either walking without any aid or with the help of a bamboo stick. In most of the patients associated multiple congenital anomalies were present. Most of those with upper limb deficiencies were working with the normal limb and using the deficient limb just for support. Most of the patients were uneducated and engaged in menial work. Few of them were graduates seeking a job. Even the well educated patients were not willing to undergo reconstructive surgery to improve their function. All the limb deficient patients were from the poorer class.

### **Aetiological factors**

In India various aetiological factors have been invoked; the use of contraceptive drugs before the birth of the affected child, jaundice or malaria during pregnancy. The most important factor had been exposure to a solar eclipse during pregnancy. Exact pathogenesis is not known but in this country because of religious belief, pregnant mothers are advised to avoid exposure during a solar eclipse. In one

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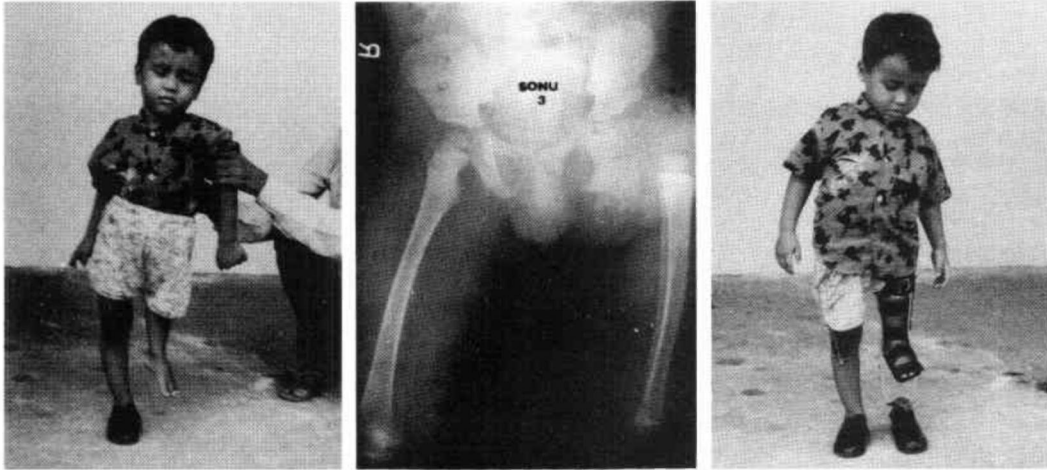


Fig. 1. A 3 year old child with longitudinal femur total deficiency and 5th ray total deficiency. Child was walking with left lower limb keeping right knee flexed. History of solar eclipse exposure during pregnancy present. Extension orthosis was fitted and now the child is walking comfortably

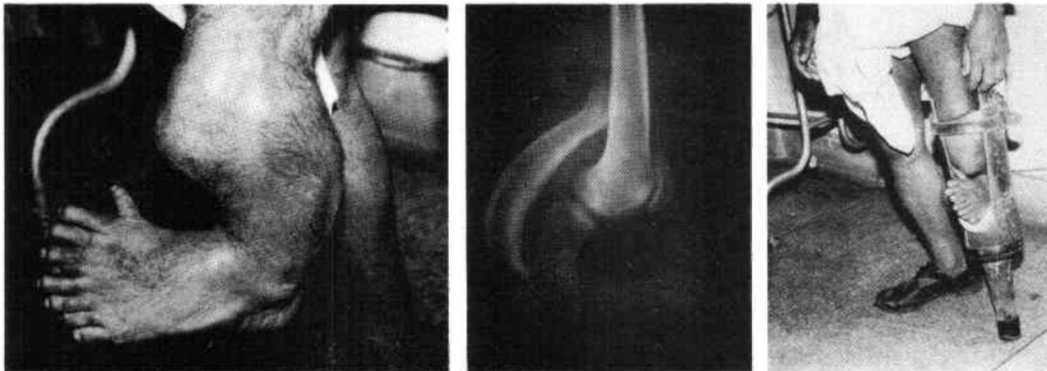


Fig. 2. A 45 year old male. Educated up to 5th standard. Farmer by occupation. Using indigenous prosthesis for last 10 years, initially he was using crutches. He can walk up to 1km a day with no difficulty.

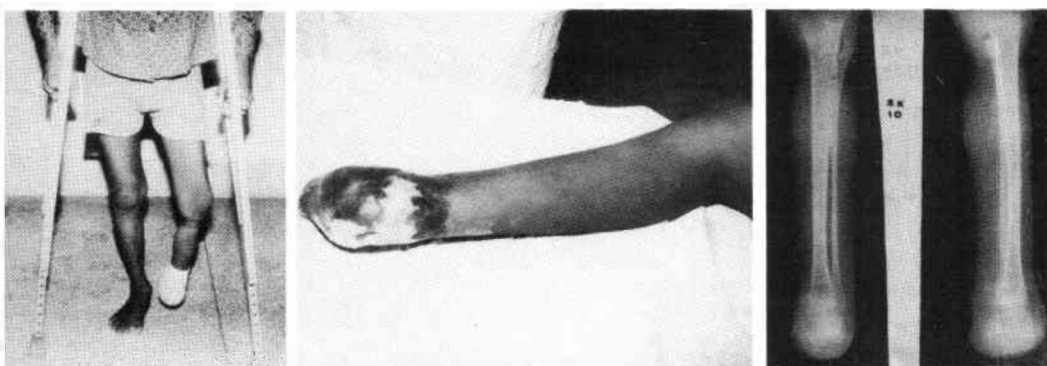


Fig. 3. A 10 year old male child uneducated having transverse tarsus partial deficiency. He has unstable scar over stump and uses crutches for walking.

study out of 30 cases 3 had definitive exposure to the solar eclipse. In the rest of the cases no clear cut history of eclipse exposure was available.

**Summary**

Thus in India the problem of congenital limb deficiency is entirely different to that in the western world. Most patients manage very well without any aids or appliances. However, with the fitting of a prosthesis or orthosis there had been a definitive improvement. As patients are

poor, prostheses and orthoses are being provided free of cost through the help of voluntary agencies and the Ministry of Welfare, Government of India scheme. Surgical procedures are being carried out free of cost in Government Hospitals.

REFERENCES

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