Hand Injuries—Still Poorly Managed

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There are 1700 injuries related to hand tools per hundred thousand farm workers per year in rural India. Productivity was impaired to the tune of 24,000 days per hundred thousand population because of injuries caused by hand tools on these farms [1]. Many of our patients in the villages get crush injury to the hand due to sugarcane crusher and other instruments used in farming. Injuries to the hand are also commonly seen in housewives as most of the household work has become mechanized like mixie, washing machine and vacuum cleaner etc. With rapid industrialization in our country industrial hand injuries also account for a high number of injuries in our country. The incidence of injuries was 36 per 10,000 workers per year. 47% were due to entrapment of the hand in active machines, 25% occurred during lifting and transportation of heavy objects and 12% while handling tools. The injuries resulted in residual deficit in 55% of cases and were serious enough to require absence from work of more than four weeks in 48% of cases. On an average 35 days were lost per injured worker, according to a report from Jaipur published as early as 1988 [2]. If these injuries are not being treated properly immediately and rehabilitation of that hand is not instituted the whole family suffers whether it is the breadwinner or home maker.

It is saddening to see young patients getting cut injury to the palm or fingers, the local general practitioner may

suture the wound without noticing the associated tendon or nerve injury. Patient may report to us after six months or so with the zone II flexor tendon injury, by that time whatever type of reconstruction is given the original repair could have given almost with normal function of the hand.

Rural patients go to the nearest Primary Health Centre where some preliminary dressings are given and sent to the Head quarters Hospitals in that region where there is no qualified Plastic Surgeon or Trauma Surgeon to deal with some of these complex injuries. The surgical opportunism of primary hand repair is lost and the patient goes in for half hearted approach by some Casualty Medical Officer and the functional status of the hand is ruined even for a simple hand injury.

Dr. Harold E. Kleinert in his foreword in the book on “Surgery of the injured Hand towards functional restoration” has commented on Prof. R. Venkataswami Hand Surgery Unit at Stanley Medical College, Chennai, where rich and poor receive the highest standard hand care and reconstruction without regard to the workers often with meagre resources as one of the Seven Wonders of the World [3].

The need of the day is Hand Surgery Units to be established in all the medical colleges in our country so that the immediate treatment of the injured hand can be done and the patient can return to his original work as he may be the only bread—winner of the family.

The role of the hand surgeon is also very important here. He or she has to be well trained in the subject at good hand surgery institutes and practice the specialty solely. Also the surgeon has to be very aggressive in the management as well as rehabilitation of the injured hand to obtain best results.

Rehabilitation of injured hand necessitates the role of physiotherapists, Occupational therapists, orthotists, and vocational counsellor. In this era of joint replacement surgery and arthroscopic surgery, simple rehabilitation

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programme is not there in many hospitals and the surgeon is also not aware of the importance of rehabilitation.

We are of the strong opinion that both plastic surgeon and orthopaedic surgeon all over the country must come together to teach management of hand injuries in undergraduate period with the concurrence from Medical Council of India. Apart from this, the General Practitioners must be updated regularly regarding hand injuries and a proper system of referral of hand injuries must be evolved.

We see lot of patients from the periphery with poorly managed hand injuries who are not able to earn his/her livelihood. That is why I feel hand injuries are still poorly managed. But with the path doyens like Prof. Venkatasamy has shown us, with well trained hand surgeons, exclusive hand

surgery units at Medical College Hospital and by evolving a system of referral of hand injuries, I am sure we can achieve good functional results from hand injuries in our country.

References

1. Adarsh Kumar, Singh JK, Dinesh Mohan, Mathew Varghese (2008) Farm hand tools injuries: A case study from northern India. *Saf Sci* 46:54–65
2. Mathur N, Sharma KK (1988) Medico-economic implications of industrial hand injuries in India. *J Hand Surg Br* 13(3):325–7
3. Venkataswami R (2009) *Surgery of the injured hand towards functional restoration*. First Edition. Jaypee Brothers Medical (P) Limited