

Occupational Therapy: Helping Hand for Hand Hazards

PRAGYAN SINGH, LECTURER OCCUPATIONAL THERAPY



Quotation: Next to the brain, the hand is the greatest asset to man, and to it is due to the development of man's handiwork (Sterling Bunnell).

Hand is also known as the second eye of a person.

With hand we do all our activities, even we can express our emotion and feelings without saying. In form of our thumb impression and signature hand is also our identity.

Occupational therapy is the only profession which has the skill to deal with hand rehabilitation. **Occupational therapists** play a key role in the rehabilitation of hand injuries, using goals to **improve range of motion, restore strength and promote independent living.**

OT services focus on enabling the client to regain functional use of the traumatized arm & hand or both and return to their pre-injury occupation. Occupational therapy makes a major contribution to the practice and continued development of hand rehabilitation. The unique combination of training in physical, functional, psychological, social, and vocational aspects of physical dysfunction enables the occupational therapist to provide comprehensive treatment necessary to return the patient with hand dysfunction to a productive life style.

The hand therapy programme emphasizes treatment technique that can be used by patient outside the formal therapy milieu thereby encourage self reliance early in the rehabilitation phase.

Occupational Therapy- Living life to its fullest

STORY: A 8 years little boy, was enjoying his Sunday with his parents. A bus which came as a bane for that boy and ran over his upper limb crushing his arm and forearm. A major surgery was done to bring back the hand as a whole unit. Still he was not able to use his affected hand.

After one month of surgery, he consulted an occupational therapist with the hope of regaining his hand functions. Occupational therapist planned a treatment program which was started with mobilization of scars to soften the skin in order to prepare the joints for range of motion activities that were to be followed. Desensitization was done starting with soft and gradually to a harder textured material to minimize the hypersensitivity (painful even to light touch) of the affected limb. Splint was provided for the maintenance of range of motion of the joints. Gradually various activities were planned to facilitate different hand functions. Now after only three months of therapy he is able to hold glass, bottle etc., with that same hand for drinking, can hold spoon to eat, button up his shirt and he is using his thumb which was like a dream before three months. Along with this, he has regained his confidence and is hopeful that he soon will be able to write legibly and go back to his school.

Causes of Hand injury

- ✓ Road- Traffic Accident
- ✓ Industrial Accident
- ✓ Violence

- ✓ Burn 

- ✓ Fracture 

- ✓ Repetitive work in a same posture for a long time etc.



Conditions related to Hand deformity.....



Erb's Palsy-

Paralysis of the arm caused by injury to the upper group of the arm's main nerves, specifically the severing of the upper trunk c5-c6 nerves. These form part of the [brachial plexus](#).

STORY- A child of 2month who was diagnosed as erb's palsy came to an otist with a complaint unable to lift his right limb.

At that age he was given positioning in a mattress designed to keep his limb in anti - deformity.

After that aroplane splint was given for a sustained stretching of a contracted muscle. Along with that splint different activities was designed to improve his strength and range of motion of that joint.

After 2 year of therapy that child is able to do all activities easily as near to normal pattern.



RADIAL CLUB HAND-

Congenital difference occurring in a longitudinal direction resulting in radial deviation of the wrist and shortening of the forearm

STORY- A child of 1 month having a deviated hand towards one side . He came to an Otist and a splint was designed and given to that child to correct that deviation and protect skin contracture.

VIC-(VOLKMAN'S ISCHAEMIC CONTRACTURE)

VIC is a condition which occurs due to lack of blood supply to a body part following atight plaster after fracture. *Volkman contracture* is a permanent shortening of forearm muscles, usually resulting from injury, that gives rise to a claw like deformity in hand and contracture in forearm.

Specialized Recent Care Services offered at a Occupational Therapy centre

- Custom Orthosis/Splint Fabrication
- Scar Management
- Joint Protection Techniques and Education
- Work Station Evaluation and Ergonomic Training
- Body Mechanics Training - Manual Therapy
- Therapeutic Activities
- Modalities: Fluidotherapy