

NMTRG Guidelines for the assessment and rehabilitation of the Pelvic and Sacral Injury Major Trauma patient

Discipline: Occupational Therapy / Physiotherapy

Management of Pelvic and Sacral Injuries

The Occupational Therapist / Physiotherapist should have knowledge of the following;

- Anatomy and physiology of Pelvis
- Fracture types and classification systems
- Fracture stability grading systems, particularly 'Open Book' fracture
- Use of pelvic binder
- Common surgical Interventions and conservative management strategies
- Protective therapeutic and moving and handling skills and techniques for patients with external fixator
- Working knowledge types of pelvic traction, use and their function
- Common complications and associated injuries e.g. pelvic ring, L5 #- lumbar plexus injuries
- Potential complications and factors increasing risk- haemorrhage, cardiac event, pressure damage, saddle anaesthesia, sexual dysfunction, pin site infections, bowel surgery inc stoma formation and bowel and bladder problems
- Radiology requirements and positioning/ transferring needs
- Knowledge and skills in chest physiotherapy, recognition of patients at higher risk of respiratory complication and effects of bedrest

The Occupational Therapist / Physiotherapist should be able to recognise;

- New onset or worsening adverse neurology
- Multi system deterioration and or risks- skin, chest, DVT, UTI, sub optimal nutrition
- Symptoms of lumbar plexus injury
- Nerve damage- bladder, bowel, sexual dysfunction
- Gait abnormalities
- Scrotal swelling
- Pelvic haemorrhage
- Pain
- Wound and pin site infection
- The local escalation protocol for worsening neurology

The Occupational Therapist / Physiotherapist should be able to offer the following interventions

- Neurovascular assessment
- Removal and re-application of skin and skeletal traction
- Lower limb (and upper) exercise programme including- pelvic floor, circulatory & strength maintenance
- Bed mobility, sleeping positions and transfer assessment, practice with appropriate aids in keeping with weight bearing status and considering other injuries
- Mobility and stair assessment, provision of walking aids and progression considering weight bearing status and other injuries
- Should also include assessment for and provision of orthotics to manage common complication e.g. foot drop
- Seating/ postural assessment and advice for static and wheelchair
- Functional assessment including washing and dressing, kitchen assessment

- Gait re-education
- Psychological input
- Environmental assessment, discharge planning including home and discharge visits
- Core stability exercise programme
- Rehabilitation Prescription provision
- Written information around possible sexual dysfunction following pelvic trauma

The Occupational Therapist /Physiotherapist is expected to complete this assessment and intervention;

- Early in the patients admission inclusive of ICU and HDU assessment / intervention
- As part of a 7 day service inclusive of ICU and HDU weekend cover
- And record it appropriately on the Rehabilitation Prescription

The Occupational Therapist /Physiotherapist should have knowledge of additional services including;

- Physiotherapy Community (Pelvic Health Physiotherapist, domiciliary, hydrotherapy, out-patients)
- Occupational Therapy in patient and community service for Assessment, intervention, provision of equipment to improve function and discharge planning
- Dietitian in-patient and community services
- Continence Nurse
- Stoma Nurse
- Ongoing medical input (Urology, Gynae, Neurology, MT Rehab)
- Falls Prevention Team
- Community/ District nursing for pressure care/assessment
- Package of care on discharge
- Psychology input as inpatient and after discharge
- Citizens advice
- Trust approved independent legal advice.
- Contribute to audit or research highlighting gaps in rehabilitation services for patients

The Occupational Therapist / Physiotherapist understands how to access the following pathways

- Onward outpatient therapy input
- Falls prevention
- Help at home on discharge

If required the patient has access to;

- Rapid access MSK rehabilitation accessed within 14 days of discharge
- Vocational rehabilitation
- Community rehabilitation within one week of discharge
- Follow up in an MDT clinic
- Complex MSK rehabilitation
- Educational intervention
- Timely access to Mental health services

Consideration for long term rehabilitation

- Links with preventative teams
- Major Trauma patient support groups
- Major Trauma / complex MSK group rehabilitation

References and Further Reading

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Oxford Medical Education- Neurological examination:
<http://www.oxfordmedicaleducation.com/clinical-examinations/neurological-examination/>

