

# FRACTURE & CONTRACTURE CARE GUIDE

Approximately 30 – 45% of older adults fall annually. The incidence and severity of falls rises with age (American Geriatrics Society (2010)). The peak age for falls in residential aged care facilities is 85 – 89 years.

## General risk factors that should be reviewed:

- ❖ People with significant cognitive impairment
- ❖ Osteoporosis
- ❖ Low BMI see pg 26
- ❖ History of falls
- ❖ Cardiac disease history
- ❖ History of Parkinson's or other motor sensory deficit
- ❖ High risk medications e.g. anti-convulsants, opioids, antiarrhythmics, sedatives
- ❖ Smoking
- ❖ Sensory deficits e.g. visual, auditory
- ❖ Previous history of fracture
- ❖ Decreased mobility
- ❖ Environmental hazards e.g. loose rugs, lack of grab rails, unsteady furniture

## Action strategies:

- ❖ Lifestyle advice e.g. activity, diet, calcium rich foods, limit alcohol intake
- ❖ Sunlight or supplemental Vitamin D, (Vitamin D supplementation recommended for all mobile adults unless contraindicated.)
- ❖ Undertake vision, hearing testing
- ❖ Neurological/cardiovascular assessments
- ❖ Cognitive assessments
- ❖ Medication review
- ❖ Consider a biphosphonate for all people with history of fractures and calcium supplement if no cardiac risk
- ❖ Falls assessment for all age/gender groups (physio assessments)
- ❖ Consider hip protectors/appropriate footwear
- ❖ Prevent dehydration
- ❖ Toileting regime
- ❖ Environmental assessment – repair cracks in concrete, install hand rails, remove clutter, adequate lighting etc

## Common Risk Factors for Fractures and Contractures

### Cognitive

- ❖ Depression
- ❖ Delirium
- ❖ Dementia
- ❖ Dehydration
- ❖ Drug reaction/medication issues
- ❖ Hallucinations/Delusions
- ❖ Agitation
- ❖ Disorientation

### Cardiovascular/ Renal

- ❖ Low BP / High BP
- ❖ Orthostatic hypotension (stand at least 3 minutes prior to taking BP)
- ❖ Dehydration
- ❖ Electrolyte imbalance
- ❖ Endocrine disorder
- ❖ Infection/UTI's

### Respiratory

- ❖ SOB
- ❖ Chest infection
- ❖ Reduced chest expansion & decreased oxygen levels
- ❖ Curvature of spine
- ❖ Calcification of thoracic region

### Musculoskeletal

- ❖ Reduced muscle tone
- ❖ Decreased muscle strength
- ❖ Reduced bone density
- ❖ Thinning subcutaneous tissues
- ❖ Loss of balance

## ACUTE FRACTURE / CONTRACTURE MANAGEMENT

### Acute Fracture Presentations:

- ❖ Haematoma/oedema
- ❖ Acute pain
- ❖ Decreased range of movement
- ❖ Decreased circulation
- ❖ Nerve injury
- ❖ Deformity of limb, shortness, rotation

**ACTION PLAN**

- ❖ Immobilisation of site
- ❖ Maintenance of functional activities after immobilisation e.g. movement of fingers/toes
- ❖ Monitor swelling, neurovascular observations
- ❖ Minimisation of pain at the fracture site during and after immobilisation
- ❖ Treat shock
- ❖ Adequate analgesia
- ❖ Providing a calm and secure environment for the patient

Is patient stable and able to be reviewed locally?

NO YES

**Go to hospital  
(call 111 for ambulance)**

**CONTACT GP**

### Contracture Presentations:

- ❖ Reduced strength
- ❖ Reduced bone density
- ❖ Thinning of subcutaneous tissues
- ❖ Increased risk of pressure sore/ulceration development
- ❖ Increased skin moisture within contracted area

**ACTION PLAN**

- ❖ Referral to physiotherapist for functional assessment EARLY for prevention and management of early contracture
- ❖ Multi-disciplinary team coordination for on-going management of contracture – keeping skin dry & intact, comfort, pain control and handling techniques
- ❖ Advice on daily activities of living & promotion of independence
- ❖ Provision of individualised exercise regime for muscle strength, endurance and balance programme
- ❖ Increase dietary intake to include high energy patient diet
- ❖ Consider referral to Occupational Therapy for pressure care aids (e.g. pressure care cushion and mattresses)