1st Edition 11/20

Breaking a Bone and Bone Health

Breaking a Bone – Common Types and Rehabilitation

Poor bone health can lead to osteoporosis and an increased risk of breaking a bone.

Any broken bone due to poor bone health is considered a serious medical emergency and typically requires time at a hospital emergency department (and may require an ambulance), admission to hospital for surgery, hospital stay, rehabilitation and home care.

A fracture (generally a medical term) and a broken bone are essentially the same thing. However, different terms are used depending on the complexity and location of the bone break for example a complete break, partial break and multiple fractures. Prescribed medication is used to protect bone health and reduces the risk of further fractures.

Common Types of Broken Bones

Any bone can be affected by poor bone health. The most serious type of fractures are in the hip and spine. Common fracture sites include the wrist, hip, spine, upper arm, forearm and ribs. Anyone who experiences a broken bone from a minor bump or fall, and is 50 years or over, should also be investigated for osteoporosis. This may include a bone density scan. This type of investigation following a first fracture is essential to diagnose osteoporosis and protect bone health to prevent further fractures.

Currently this is not standard practice. Healthy Bones Australia strongly recommends that anyone over 50 years who has had a broken bone discusses osteoporosis investigation with their doctor.

Action Following a Fracture

In patients over 50 years the presence of a fracture (due to a minor incident) makes osteoporosis diagnosis likely. Action must then be taken by your doctor to protect your bone health which may include treatment. Bone density testing is recommended to monitor the impact of treatment.

Recovering from a Fracture

Once a broken bone occurs and osteoporosis is investigated and diagnosed, specific medication will be prescribed by your doctor to protect your bone health and reduce the risk of further fractures. All fractures require recovery time and rehabilitation.

Rehabilitation programs can take place in a hospital, outpatient clinic, rehabilitation centre, private practice, community centre, fitness facility and/or at home. The program will depend on the type of fracture and your age. A physiotherapist will usually plan an exercise program as part of your rehabilitation and an occupational therapist can conduct a 'home audit' and may recommend walking aids if needed.

Steps in Recovering from Common Types of Fracture

Wrist and ankle fractures

Most wrist fractures require a cast for about 6 weeks. Exercises are recommended for the fingers and shoulder whilst the cast is on, to prevent muscle wasting and reduced flexibility during this time. After

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removal, a physiotherapist will advise on rehabilitation exercises for the wrist to support recovery and help rebuild strength. Ankle fractures may require a boot to mobilise the foot and rehabilitation is also important for recovery.

Spinal fractures

Fractures within the spine can vary in location and seriousness. Spinal fractures occur because the vertebrae becomes weakened due to poor bone health. Pain from a spinal fracture usually lasts 6-8 weeks.

Unfortunately, spinal fractures maybe misdiagnosed when pain is wrongly attributed to other causes. This can result in longer periods of intense pain and be upsetting and frustrating for the patient until a proper diagnosis is made. This occurs because spinal fractures can lead to referred pain in other areas of the body (for example, a fracture in the lower spine can create a sense of pain in nearby areas like the gut area or groin). Doctors may therefore test for other issues not linked to a fracture of the spine. This can delay a proper diagnosis.

Once diagnosed the fracture can be properly managed which includes prescribed medication. Rehabilitation following a spinal fracture initially commences with a supervised physiotherapist exercise session to prevent any further injury. Hydrotherapy is a common first step. When the fracture has healed your physiotherapist may also recommend specific exercises to help strengthen back muscles which has been shown to help reduce the risk of further spinal fractures.

Hip fractures

Hip fracture remains one of the most serious types of fracture due to poor bone health. Surgery is generally required and rehabilitation is essential usually commencing 1-2 days after surgery. Exercise is crucial for rehabilitation after a hip fracture. Most 'in hospital' programs run for several weeks. Resistance training (lifting weights) has been shown to be effective in recovering from a hip fracture.

Patients who do intensive resistance exercise for 6-12 months following surgery greatly improve their ability to get up, walk, climb stairs and do household tasks compared to those who have not participated in ongoing rehabilitation exercises.

All patients who have sustained a fracture due to poor bone health will generally be prescribed osteoporosis medication to manage bone health and reduce the risk of future fractures. Medication should be taken as advised to receive the full benefit.

Preventing Further Fractures

In Australia research has shown up to half of all people who have a hip fracture already had a previous fracture (from a minor incident) in another bone. This demonstrates the importance of capturing and investigating patients after any initial fracture, and if underlying osteoporosis is diagnosed it should be treated and managed to prevent further fractures. Breaking a bone is a major risk factor for osteoporosis. There are other common risk factors which should also be reviewed with your doctor.

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Other Common Risk Factors

Review other common risk factors for osteoporosis. If any risk factors apply to you – discuss these with your doctor.

Personal History	Medical Conditions	Medications
Previous fracture (from minor bump or fall)	Coeliac disease	Certain treatment for breast cancer
Family history of osteoporosis (parent/sibling)	Overactive thyroid or parathyroid	Certain treatment for prostate cancer
Loss of height (3 cm or more)	Rheumatoid arthritis	Glucocorticoids (steroids)
Smoking/Excessive alcohol	Early menopause/Low testosterone	Anti-epilepsy treatment
Inadequate calcium, vitamin D or lack of exercise	Chronic kidney disease or liver disease	
Age 70 years and over	Diabetes	

Calcium. Vitamin D. Exercise

Take simple steps to help support your bone health.

Focus On	Recommended
Calcium	• 1,000 mg per day from the diet • Increasing to 1,300 mg for women over 50 years and men over 70 years • If dietary intake is low a supplement may be required
Vitamin D	• Limited sun exposure – in summer a few minutes per day, in winter slightly longer • Avoid UV index above 3 • If vitamin D deficiency is confirmed by your doctor a supplement may be required
Exercise	• Specific mix of weight bearing, resistance training and balance exercises

For more information

Call our national toll-free number
1800 242 141

Visit our website
healthybonesaustralia.org.au

Talk to your doctor

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