



# Osteoporotic Spine Fracture



## Understanding Osteoporosis

Osteoporosis is a disorder resulting in lower bone density and strength. It mostly affects women aged 50 and above after menopause, those on long term steroids and those who drink excessively. Osteoporosis can lead to spine and hip fractures.

## Symptoms of Osteoporotic Spine Fracture



- Back pain
- Hunched back
- Leg weakness and numbness
- Problems balancing or walking
- Inability to control bladder or bowels

Figure 1  
Spine fracture as seen in a CT scan

## Diagnosing Osteoporosis

A bone mineral density (BMD) test is used to measure the mineral content of bones. It is a simple, painless and non-invasive test that takes less than 15 minutes. A blood test will also be done to measure calcium and vitamin D levels for deficiencies.

## Diagnosing Osteoporotic Spine Fracture

Depending on your condition, the doctor will recommend an x-ray, Computed Tomography (CT) or a Magnetic Resonance Imaging (MRI) scan.

## Treating Osteoporotic Spine Fracture

A team of medical professionals including doctors, nurses and allied health workers (physiotherapist, occupational therapist and orthotist) are involved in the treatment.

- Medications
  - Pain relievers to manage pain and allow one to regain movement faster
  - Calcium and vitamin D supplements to build bone strength
  - Medications to slow down and reverse bone loss
- Physiotherapy to strengthen core muscles and manage pain
- Braces to support the spine and prevent excessive curvature
- When the pain does not improve, bone cement may be injected into the fractured area in a procedure known as vertebroplasty
- Surgery is rarely needed unless the spinal cord is compressed or in very severe fractures

A fracture can recur within 1 to 2 years if osteoporosis is not treated, especially for those aged 60 and above or if there is a history of previous fractures.

Seek immediate medical help if you experience:

- Back pain after a fall
- Worsening back pain when there was no fall
- New and/or worsening of leg weakness and numbness
- New and/or worsening ability to control bladder and bowels

## Living with Osteoporosis

Slow down bone degeneration with these tips:

- Take the daily recommended amount of calcium and vitamin D
- Exercise regularly to build strong bones
- Do strengthening and flexibility exercises for the neck and back muscles
- Avoid alcohol and smoking
- Reduce salt and caffeine intake
- Listen to your doctor and follow-up regularly to reduce risk of fractures

## Support for Osteoporosis

### Osteoporosis Society (Singapore) (OSS)

The OSS helps patients and the public learn about osteoporosis – causes, prevention, diagnosis, treatment and management.

Visit [www.osteoporosis.sg](http://www.osteoporosis.sg), contact +65 6346 4402 or email [osteoporosis\\_society@themeetinglab.com](mailto:osteoporosis_society@themeetinglab.com) for details.

### WISHBONE – Women (And Men) in Support of Healthy Bones

An Osteoporosis Support Group at the Singapore General Hospital, WISHBONE is a platform for those who suffer from osteoporosis to share their stories and tips on living with osteoporosis.

For details, contact +65 6326 5837.



Scan the QR code to learn  
more about other  
Neuroscience conditions

**The National Neuroscience Institute operates out of  
two main campuses (TTSH, SGH) and  
four partner hospitals (CGH, KKH, KTPH, SKH).**



**National  
Neuroscience Institute**  
SingHealth



Brochure content serves as a guide only  
Seek the advice of your doctor for more details

Information correct as of August 2020

## Contact Information

### **NNI@TTSH**

Tan Tock Seng Hospital, NNI Block, Neuroscience Clinic

11 Jalan Tan Tock Seng, Singapore 308433

Main Tel: (65) 6357 7153

Appt. Tel: (65) 6330 6363

Email: [appointments@nni.com.sg](mailto:appointments@nni.com.sg)

Website: [www.nni.com.sg](http://www.nni.com.sg)



### **NNI@SGH**

Singapore General Hospital, Block 3, Clinic L

Outram Road, Singapore 169608

Main Tel: (65) 6222 3322

Appt. Tel: (65) 6321 4377

Email: [appointments@sgh.com.sg](mailto:appointments@sgh.com.sg)

Website: [www.nni.com.sg](http://www.nni.com.sg)



### **NNI@CGH**

Changi General Hospital

2 Simei Street 3

Singapore 529889

Appt. Tel: (65) 6850 3333

### **NNI@KKH**

KK Women's and

Children's Hospital

100 Bukit Timah Road

Singapore 229899

Appt. Tel: (65) 6294 4050

### **NNI@KTPH**

Khoo Teck Puat Hospital

90 Yishun Central

Singapore 768828

Appt. Tel: (65) 6555 8828

### **NNI@SKH**

Sengkang General Hospital

110 Sengkang East Way

Singapore 544886

Appt. Tel: (65) 6930 6000