



# VCF Pathway

骨質疏鬆脊椎壓縮骨折臨床路徑

**A Osteoporotic Vertebral Fracture pathway to  
bridge the secondary fracture prevention care  
gap**

**F-P1.19**

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**Time :10:15-10:45**

**Venue ; A of room 222**

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Why secondary prevention is important ?





## ***Introduction:***

A wide care gap exists between the occurrence of vertebral fragility fractures and the diagnosis and treatment of osteoporosis. The underlying causes of fracture i.e. osteoporosis and sagittal mal-alignment remain under-diagnosed and under-treated resulting in imminent fracture within first year . This care gap in secondary prevention must be addressed to minimize both the debilitating consequences of subsequent fractures for patients and the associated burden to healthcare systems.

In 2011, International Osteoporosis Foundation published a position paper supporting a system coordinator-based approach for secondary prevention in fragility fracture patients and this is consider as a standard of care for

In NTEC ,the Osteoporotic Vertebral Fracture Pathway (OVFP) is a model of care designed and tailored to bridge this care gap .



## ***Methods:***

The study consisted of three phases.

**Retrospective phase**, the clinical records of 200 patients with VCF were reviewed as historical cohort .

**Implementing phase**, a specific clinical pathway was designed for systematically identifies, investigate and intervene for underlying osteoporosis with the objective of secondary fracture prevention.

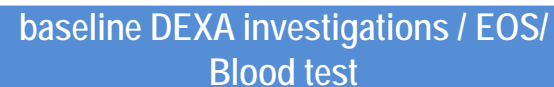
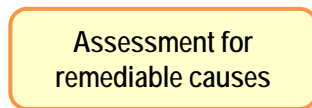
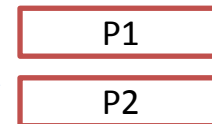
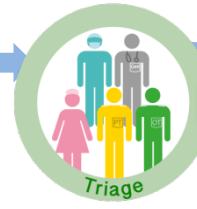
**Prospective phase**, 61 participants were assessed and enrolled between 1 December 2016 and 31 January 2017. All participants underwent prospective follow-up at baseline, six and twelve month intervals.

Descriptive analysis and comparisons between participants enrolled before and after the implementation of the Follow Ups at baseline, six and twelve month are presented.



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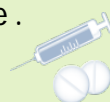
## 骨質疏鬆脊椎壓縮骨折臨床路徑



### Osteoporosis Management

Secondary prevention of fragility Fracture .

- Denosumab 60mg 6 monthly
- Calcium + Vitamin D ( 800-1000 IU Daily)



### Fall Prevention Program- JOCOC CUHK

Multi-dimensional assessment

PT – exercise / Balance

OT -Home based Lifestyle functional  
exercise (LIFE)



### Nurse Led Clinics

- 1.counseled individually by on abnormal findings in the multi-dimensional assessment
- 2.Advised on follow-up actions.
- 3/Drugs will be reviewed for compliance and safety issues.
4. Appropriate balance and resistance exercise and sunlight exposure will be prescribed.

Problem Cases

refer back



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## ***Results:***

Before the implementation of the OVFP, only 4% of them received diagnostic or therapeutic indications for the osteoporosis. 23 cases out of 200 get second fracture required admission within 1 year.

After setting up the OVFP, a total of 61 patients (85.2% from the Out Patient Department and 14.8% from the inpatients)

The mean T- score at Spine was  $-1.93 \pm 1.92$  (N=46, T-Score  $< -2.5 = 21$ ) and at Hip was  $-2.22 \pm 1.16$  (N=45, T-Score  $< -2.5 = 19$ ).

All patients got sagittal mal-alignment required intervention .

All patients received calcium/vitamin D and/or osteoporosis medication at discharge.

Only **1 out of 61** patient got a second fracture on 1 year follow up.

**The implementation of a OVF has been proven to be effective for implementation of secondary prevention which reduce their risk of subsequent fractures and prevention readmission because of secondary fracture .**