

# Catching the Cracks: Male Osteoporosis



This department covers selected points from the 2006 Endocrine Update: A CME Day from the Division of Endocrinology and Metabolism at McMaster University and the University of Western Ontario, June 2006.  
Program Chairs: Aliya Khan, MD, FRCPC, FACP; and Terri Paul, MD, MSc, FRCPC



Sarah Khan, BSc Honours; and T. Paul, MD, MSc, FRCPC

**B**one strength reflects the integration of two main features: bone quantity and bone quality. Sadly, osteoporosis is often undiagnosed and untreated in men. The mortality rate in men with hip fractures at old age is markedly higher than in women. Men also have a higher prevalence of secondary causes of osteoporosis than women.

## Investigations

BMD testing is recommended in all men > 65-years-of-age, as well as in younger men with secondary causes for fracture, or other risk factors for fracture. For men < 50-years-of-age, it is important that the diagnosis of osteoporosis be based on Z-scores rather than T-scores.

## Treatment

Treatment should be provided to men aged > 65 years and for those whose T-score is < - 2.5 at the lowest measured site of the hip, spine or


forearm. Men > 50-years-of-age who have had a fragility fracture or vertebral compression fracture should be treated even if their T-score is > - 2.5 as a fragility fracture confirms the presence of osteoporosis, regardless of their BMD T-score. Men with clinical hypogonadism, or who have received glucocorticoid therapy for more than three months are also recommended to obtain treatment for low bone density.

## Management

First-line management options for osteoporosis in men include the bisphosphonates: alendronate and risedronate. Teriparatide has also been approved for use in men with severe osteoporosis.

Testosterone replacement therapy has been proven to improve BMD in men with primary or secondary hypogonadism, but not in eugonadal men. Currently, there is no fracture data with androgen replacement.

## Conclusion

Overall, clinical trial data on men is limited. Early identification and treatment is recommended. 

**Ms. Khan** is a Bachelor of Science Honours Student, University of Ottawa, Ottawa, Ontario.

**Dr. Paul** is an Assistant Professor, Endocrinology and Metabolism, University of Western Ontario, London, Ontario.