Distal radius fracture in men- osteoporosis, functional outcome and sick leave

Abstract of thesis project by PhD-student Lisa Egund

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Background

The distal radius fracture is one of the most common fractures in both men and women. In contrast to women, the incidence remains relatively low in men until the age of 70-80 after which there is a moderate increase. New data shows an increasing incidence over the last decade, mainly driven by a rise in the working population aged 17-64 years. A fracture to the distal radius results in various degrees of loss of function and in the working population, time lost from work. Despite being so often encountered, there is still no consensus on optimal treatment of this fracture type. The distal radius represents one of the earliest indicators of osteoporosis and risk of future fragility; to which extend men with radius fracture are at risk of osteoporosis, is still unclear.

Studies to date have mostly focused on different surgical treatments and the populations are overrepresented by women. The information on men and radius fracture is still very limited.

Aim and method

Preliminary results

The results from the first study suggests, that men aged 40 and over who suffer a distal radius fracture have lower BMD and are at increased risk of skeletal fragility. Even in the younger men a trend toward a higher risk of osteoporosis was apparent.

In the second study, we conclude that malunion of the fracture results in a higher arm-related disability at 1 year after fracture. Men > 65 years have an overall significantly worse outcome and heal more often with malunion; malunion is not correlated to functional outcome in this population. BMD is not an independent predictor of functional outcome in men with distal radius fracture.

Presentation of a distal radius fracture in a man, regardless of trauma level, indicates that screening for osteoporosis and risk of future fractures should be considered. Future studies of functional outcome after radius fracture in the old, especially considering pre-fracture function, is warranted in the light of a growing population of healthy active elderly.