

## **Knee osteoarthritis and pain perception in end of career military personnel**

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### **ABSTRACT**

**Background:** Although active duty military personnel are very athletically active during their career they tend to present with knee symptoms before retirement. The prevalence of knee osteoarthritis (OA) in end of career military personnel is not well documented.

**Study design:** Cross sectional study.

**Methods:** A group of 100 athletically active military personnel 35 to 55 years old (mean age 49.60 SD $\pm$  5.9) approaching end of military career were examined clinically and sonographically for knee OA and they were administered the Knee Injury and Osteoarthritis Outcome Score (KOOS) questionnaire. A matched group of 100 of 100 veteran Greek football players served as comparison group.

**Results and discussion:** The prevalence of sonographic findings of OA was high in both groups but significantly higher ( $p=0.01$ ,  $n=200$ ) in the football (52%) than in the military group (33%). However perceived pain in KOOS score was more prevalent in the military group. This may related to elevated pain threshold in the athletes and subclinical depression affecting the military approaching retirement. However this statement needs further study.

**Conclusion:** Although both groups had significant prevalence of knee OA the military group had worse pain scores.

**What this study adds to existing knowledge:** Military personnel approaching retirement have increased knee pain scores compared to a group of retired football players despite lower prevalence of knee osteoarthritis.