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## Internal derangement of the knee in physically demanding occupations: a rapid review

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Poster Presentations Friday Lunchtime, Exhibition Hall, October 6, 2023, 12:20 PM - 1:02 PM

**Aim:** To identify and review studies reporting on occupational risk factors for the occurrence of internal derangement of the knee (IDK) in physically demanding occupations.

**Design:** Systematic review of the literature.

**Method:** This review was guided by the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines. A comprehensive search of seven databases was performed using terms derived from three concepts: 'risk', 'paid occupations', and 'IDK'.

**Results:** One article met the eligibility criteria. Findings revealed that male Turkish military personnel with IDK that was secondary to anterior cruciate ligament (ACL) ruptures, managed without reconstruction, and who continued their regular military duties following ACL rupture, had a high prevalence of additional intra-articular lesions. A moderate positive correlation was found between the time from the initial ACL rupture and the presence of at least one additional intra-articular lesion ( $r_s = 0.574$ ;  $p = 0.0001$ ). Additionally, individuals aged 30 years and older were at slightly greater risk than their younger peers.

**Conclusion:** These findings suggest that the occupational demands to which Turkish military personnel are exposed are associated with IDK developing and worsening over time after ACL rupture as military duties continue.

### Key Practice Points:

- ACL injuries managed conservatively are frequently associated with additional intra-articular lesions in male military personnel.
- A positive correlation was found between age and the development of lesions in the knee.