Title: Running Injuries in a Military Environment: Role of Lower Limb Biomechanics

Congress Theme: (P)Rehab of Running Related Injuries
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Summary

The Royal Marines are one of the most elite military forces in the World, with a particularly arduous 36-week training programme. Injury of Royal Marines recruits during their training compromises their effectiveness and is associated with high personal and financial cost. Our programme of research has aimed to understand biomechanical factors influential on musculoskeletal lower limb injury occurrence in this population, providing evidence to inform targeted interventions to reduce injury risk. This work has resulted in a change in practice whereby recruits undergo routine plantar pressure data collection during walking and running at the commencement of training. These baseline data have been effective at supporting the management of injured recruits. In addition, identification of biomechanical factors influential on injury risk has improved the understanding of desirable footwear characteristics, supporting changes in standard issue footwear. This focused research has been carried out in close collaboration with the Institute of Naval Medicine and Commando Training Centre Royal Marines.