

Treatment and Prevention of Exercise-Related Leg Pain in young Service members

Congress Theme: "From Rehab to prehab"

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Summary

Exercise-related leg pain (ERLP) is a common problem for young soldiers and has a large impact on military training. Despite the identification of many risk factors for ERLP, the incidence of these injuries does not go down significantly. In The Royal Netherlands Armed Forces the three most common diagnoses in the ERLP group are: 1. Medial Tibial Stress Syndrome (MTSS); 2. Chronic exertional compartment syndrome (CECS); and 3. A combination of both MTSS and CECS. From 2011 onward consecutive studies have been launched from the Military Sports Medicine Department to improve the conservative treatment results for MTSS and CECS. This presentation will focus on the promising results of gait retraining of running and marching for service members with ERLP. Gait retraining is of value as treatment and may be of value in primary and secondary prevention of ERLP.

Practical guidelines will be presented for medical practitioners and military leaders, introducing the terms MILRUN (slow running in military boots) and MILMARCH (fast walking in military boots).

Literature

1. Zimmermann WO, Helmhout PH, Beutler A. Prevention and treatment of exercise related leg pain in young soldiers: a review of the literature and current practice in the Dutch armed forces. *J R Army Med Corps* 2017, 163, 94-103.
2. Zimmermann WO, Valderen NRI, Linschoten CW, Beutler A, Hoencamp R, Bakker EWP. Gait retraining reduces vertical ground reaction forces in running shoes and military boots. *Transl Sports Med* 2019, 2, 90-97.
3. Zimmermann WO, Hutchinson MR, Van den Berg RH, Hoencamp R, Backx FLG, Bakker EWP. Conservative treatment of anterior chronic exertional compartment syndrome in the military, with a mid-term follow-up. *BMJ Open Sport Exerc Med* 2019, 5, e000532.