



RUN 500 KILOMETERS AND YOUR CHANCE OF GETTING INJURED = 40 - 50 %

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BACKGROUND

Depending on injury definition and length of follow up period, the incidence of Running Related Injuries (RRIs) varies between 11 – 85 %. The consequence of a shorter or longer drop-out of a running regimen may be a higher likelihood of decreased self-image and a resumption of a sedentary lifestyle, causing an increased risk of lifestyle diseases. Prevention of RRI is necessary to ensure adherence to running. The most frequent RRIs among recreational runners are patella femoral pain syndrome (PFPS), iliotibial band syndrome (ITBS), plantar fasciitis, meniscal injuries, and medial tibial stress syndrome (MTSS). However, no previous studies have investigated the incidence of specific RRIs among novice runners in a prospective study.

OBJECTIVE

The purpose of this study was to describe the most common musculoskeletal RRIs among inactive persons taking up a one-year running regime.

METHODS

Healthy participants between 18 and 65 years of age, who had no injury of the lower extremity in the three months prior to inclusion and who have not been running on a regular basis in the previous twelve months, were eligible for inclusion in the one-year follow-up study. Recruitment was assisted by advertisements in the local media, hospitals, and at Aarhus University. During summer 2011 a total of 1532 persons requested to participate by completing an online questionnaire; of these, 970 persons were tested at baseline. In case of RRI, the participant attended a clinical examination and diagnose was registered.

RESULTS

A total of 931 participants were included in the study. Median age was 36 iqr 14. Mean BMI was 26.0 ± 4.1 .

Two-hundred and fifty-five participants sustained at least one injury during 155,341 kilometers of running in 33,924 training sessions.

The cumulative risk of sustaining an injury after 500 kilometers of running was 55.6% [95% CI: 50.1%; 60.8%] (Figure 1). MTSS was the most common diagnosis (n = 39), followed by PFPS (n = 27), meniscal injuries medially (n = 20), achilles tendinopathy (n = 15), ITBS (n = 10), gastrocnemius injuries (n = 10) and hamstring injuries (n = 8).

CONCLUSION

The risk of sustaining an injury while running is high among novice runners. More work is needed to ascertain risk factors for injury development.

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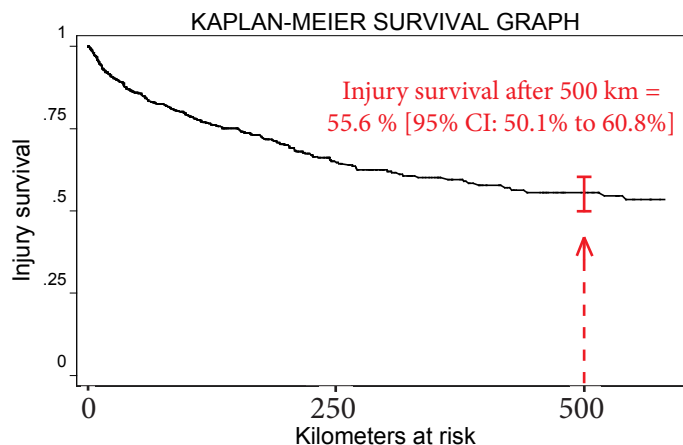


Figure 1: Injury survival during the first 500 km. of running.

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