Introduction

Soccer is the most popular sport in the world, with about 200 million participants including both sexes and across all age groups [18] and carries a certain risk of injury for its participants, from 13 to 35 injuries per 1,000 player-hours of competition [17]. Unfortunately, less is known about the prevention, risk factors, mechanisms, injury severity of soccer-related injuries and their resulting time lost to play while players recover [8, 14]. In addition, no consensus exists about study design, data collection, and injury definitions in the epidemiological studies of soccer injuries to date [14]. Preventive measures in football – just like in any other sport – should be based on epidemiological research [25].

There is a serious lack of research in this area. Among 37 soccer-related injury prevention articles, only four articles are regarding randomized controlled trials (RCTs) (Table 1). There is also no consensus on injury prevention strategies. As early as 1983, Ekstrand and Gillquist [9] showed a significant reduction in the overall number of soccer injuries through a seven-part prevention program. The rate of the most common types of soccer injuries, sprains and strains to ankles and knees, was reduced significantly. However, in more than 20 years, only nine more injury prevention studies have been published regarding soccer, and only five of them regarding men players at the senior level. Tropp [24] showed that a balance training program or the use of orthoses resulted in significantly fewer ankle sprains than for a control group. Later, orthoses and proprioceptive training were proven useful to prevent ankle and knee injuries, respectively. Finally, Askling et al. [5] and Arnason et al. [3] have recently observed a reduction in hamstring strains among male players through eccentric strength-training programs.

Although the incidence and pattern (injury type, localization, and severity) of injuries in soccer have been described in detail, much less is known about their risk factors. Therefore, we do not know which players should be targeted, for instance through specific training programs.