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Urinary Incontinence and Performance in Elite Athletes

Authors : María Barbaño Acevedo Gómez, Elena Sonsoles Rodríguez López, Sofía Olivia Calvo Moreno, Ángel Basas García, Christophe RamíRez Parenteau

Abstract : Introduction: Urinary incontinence (UI) is defined as the involuntary leakage of urine. In persons who practice sport, its prevalence is 36.1% (95% CI 26.5% –46.8%) and varies as it seems to depend on the intensity of exercise, movements and impact on the ground. Such high impact sports are likely to generate higher intra-abdominal pressures and leading to pelvic floor muscle weakness. Although physical exercise reduces the risk of suffering from many diseases the mentality of an elite athlete is not to optimize their health, achieving their goals can put their health at risk. Furthermore, feeling or suffering from any discomfort during training seems to be normal within the elite sport demands. Objective: The main objective of the present study was to know the effects of UI in sports performance in athletes. Methods: This was an observational study conducted in 754 elite athletes. After collecting questions about pelvic floor, UI and sport-related data, participants completed the questionnaire International Consultation on Incontinence Questionnaire-UI Short- Form (ICIQ-SF) and ISI (index of incontinence severity). Results: 48.8% of the athletes declare having losses also in rest, preseason and / or competition ($\chi 2$ [3] = 3.64; p = 0.302), being the competition period (29.1%) the most frequent where suffer from urine leakage. Of the elite athletes surveyed, 33% had UI according ICIQ-SF (mean age 23.75 ± 7.74 years). Elite athletes with UI (5.31 ± 1.07 days) dedicate significantly more days per week to training [M = 0.28; 95% CI = 0.08-0.48; t (752) = 2.78; p = 0.005] than those without UI. Regarding frequency, 59.7% lose urine once a week, 25.6% lose urine more than 3 times a week, and 14.7% daily. Based on the amount, approximately 15% claim to lose a moderate and abundant. Athletes with the highest number of urine leaks during their training, the UI affects them more in their daily life (r = 0.259; p = 0.001), they present a greater number of losses in their day to day (r = 0.341; p <0.001) and greater severity of UI (r = 0.341; p <0.001). Conclusions: Athletes consider that UI affects them negatively in their daily routine, 30.9% affirm having a severity between moderate and severe in their daily routine, and 29.1% loss urine in competition period. An interesting fact is that more than half of the samples collected were elite athletes who compete at the highest level (Olympic Games, World and European Championship), the dedication to sport occupies a big piece in their life. The most frequent period where athletes suffers urine leakage is in competition and there are many emotions that athletes manage to get their best performance, if we add urine losses in that moments it is possible that their performance could be affected.

Keywords : athletes, performance, prevalence, sport, training, urinary incontinence
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