Letter to the Editor





Management of Injury Risk for Continuous Participation in Badminton

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Dear Editor-in-Chief

In a survey of sports activities that continue to participate in Korea, 1) weight training/aerobic (12.1%), 2) yoga/pilates (5.6%), 3) golf (4.8%), 4) basketball/volleyball (4.4%), and 5) badminton (3.5%) (1). Badminton is the fastest game in a racket sport, usually playing with overhead shots, and players require aerobic fitness, agility, strength, speed and accuracy, and also a technical sport that requires good exercise coordination and sophisticated racket movements (2). Due to the nature of badminton, which requires playing with strong and fast movements, a lot of injuries occurs.

58.5% of patients with joint and ligament injury were located in the lower extremities most frequently and 19.8% of patients had muscle injury in 7 to 57 years' participants (3). The most common injuries were strain and the most common injured body sites were the back, the shoulder, the thigh, and the knee in elite badminton players (4). In youth badminton players, soft tissue sprains/strains were the most common injury (64%), one third of the injuries occurred in the lower leg especially in the knee, followed by back injuries and the risk of injury was 57% (5).

These injuries not only reduce the performance of elite athletes, but also adversely affect the continued participation of general population in badminton. Elite athletes want to return quickly through rehabilitation, but general population do not return due to fear of injury or switch to other sports activities. In addition, most general population in badminton judge themselves whether they continue to play even if they are injured. For this reason, most of the general population in badminton start play badminton again without complete treatment, resulting in a greater risk of injuries. To prevent injury, suggested that not only elite athletes but also general population in badminton increase range of motion, countermovement jump height and agility through dynamic stretching before training or competition (6). In particular, in feet (22.9%), lower-limb injuries were the most common at 54.3%, the most common type was musculotendinous injuries (51.4%), smash and lunge were the most common causes of upper limb injuries and lower-limb injuries, respectively and most of the injuries occurred during the first third (46.2%) of the play in elite athletes (7). Recent study also shown the most injuries in the first third of the play, and some studies have reported the areas of elite athletes' injuries.



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However, the mechanism and injury site of the general population in badminton were not shown, as only injuries to specific site of elite athletes occur intensively. It is necessary to examine in more detail the injuries and diagnoses of general population in badminton. Therefore, more experiments and research are needed to investigate the injuries and diagnosis of general population in badminton. The survey is expected to help general population in badminton improve their continued participation as well as prevent chronic injuries.

Conflict of interest

The authors declare that there is no conflict of interest.

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