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Original article

Injuries among amateur runners☆

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ABSTRACT

Objectives: To determine the frequency and severity of injuries that affect amateur runners.
Methods: This study was conducted by means of a questionnaire applied to 204 amateur runners. Individuals who were under the age of 18 years and those who were unpracticed runners were excluded. The data gathered comprised the number, type, site and degree of severity of the injuries and the individuals' age and sex.
Results: It was observed that male athletes predominated. The mean age was 32.6 ± 9.3 years with a range from 18 to 68 years, and the injuries were classified as mild, keeping the athlete away from practicing running for fewer than eight days. Sprains, blisters and abrasions were the most frequent injuries, located most often on the lower limbs and predominantly on the feet.
Conclusion: In practicing running, sprains, blisters and abrasions occur frequently, but are mild injuries. They mostly affect the lower limbs.

Lesões em praticantes amadores de corrida

Palavras-chave:
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Exercício

RESUMO

Objetivos: Verificar a frequência e a gravidade das lesões que acometem praticantes amadores de corrida.
Métodos: O estudo foi conduzido por meio de questionário aplicado a 204 corredores amadores. Foram excluídos do estudo menores de idade e pessoas sem prática de corrida. Número, tipo, topografia e grau de gravidade das lesões, além de idade e sexo, foram os dados coletados.

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Resultados: Observou-se predomínio de atletas do sexo masculino, idade média de 32,6 ± 9,3 anos com variação de 18 a 68 anos. As lesões foram classificadas como leves e afastaram o atleta da prática de corrida por menos de oito dias. Entorses, lesões bolhosas e escoriações foram as lesões mais frequentes, localizadas mais frequentemente nos membros inferiores, com predomínio nos pés.

Conclusão: Na prática de corrida, entorses, lesões bolhosas e escoriações são frequentes, porém são leves e acometem mais os membros inferiores.

Introduction

The importance of physical activity within the field of healthcare has been increasing. This has been justified by the large amount of evidence showing that regular exercise practices have beneficial effects on individuals, as a factor for improving their health and quality of life. It is known that regular practicing of running is associated with improvement of blood glucose levels, cholesterol and cholesterol fraction concentrations and lean mass and bone percentages, among other benefits.[1]

However, practicing sports activities exposes individuals to physical injuries, which may sometimes be even greater than the injuries among workers who perform repetitive movements. For example, this can occur among soccer players and such injuries keep these players away from their sport for a few days.[2] Bennell and Crossley[3] demonstrated that exercising to exhaustion, without guidance or with inadequate guidance, may contribute toward a higher injury rate.

Running may give rise particularly to knee, ankle and foot injuries. These may affected up to 83% of amateur or competitive runners and thus impair their quality of life, either temporarily or definitively.[4–8]

Some studies have sought to ascertain the epidemiology of sports injuries in order to provide better indications for safer sports practices for given populations and to develop injury prevention strategies. Higher body mass index, presence previous injuries, use of improper footwear with an inappropriately low heel and a fallen navicular bone in women have been found to be predictive factors for injuries while running.[6,9,10]

The classical definition of injuries was presented by Dvorak and Junge[10]: an injury is an event that occurs during training or a match that causes the sports player to be absent from the next training session or match. In this case, the injury is then followed by an investigation in order to make an anatomical diagnosis and provide treatment.

Injury classification according to severity is based on the length of absence from sports practice. Absences of one to seven days are taken to be mild; eight to 28 days, moderate; and greater than 28 days, severe.[11]

The objective of this study was to ascertain the frequency and severity of injuries that affect individuals who are amateur runners.

Materials and methods

This study was approved by our institution's medical ethics committee under the number 20817613.8.0000.5481 and the approval number 407.082. It was conducted by means of a questionnaire that was applied to individuals frequenting a public park that has two running tracks: one that is cemented and the other that is irregular with small stones.

The individuals included in the study were adult amateur runners, and those under the age of 18 years were excluded.

Through the questionnaire, the following data were gathered: age, sex, schooling level, number of training sessions per week and mean duration of training per week, length of time for which the individual had been a runner, any occurrences of injuries while running, location of the injury, any need to take time off running and the length of such absences.

The severity of the injuries was classified as described by Carter et al.,[12] in accordance with the length of absence from running after the injury reported by the runner. These absences were classified as mild (one to seven days), moderate (eight to 28 days) or severe (greater than 28 days).[8]

Results

Interviews were conducted with 204 amateur athletes: 117 males (57.4%) and 87 females (42.6%). Their mean age was 32.6 ± 9.3 years, with a range from 18 to 68 years.

None of the interviewees were illiterate. Eleven (5.4%) had not completed high school education; 35 (17.1%) had completed high school education; 78 (38.3%) had started but not completed a university-level course; and 80 (39.2%) had completed a university-level course.

These athletes reported practicing running twice a week in 22.6% of the cases (46); from three to five times a week in 65.6% (134); and more than five times a week in 11.8% (24). For 32.5% of the athletes (66), their training was every day, with a duration of less than 1 h and 30 min; for 53.8% (110), its duration was from 1 h and 30 min to 3 h; and for 13.7% (28), its duration was more than 3 h. Among all the interviewees, 36 (17.7%) had been training for less than six months, 47 (23%) for six months to one year; and 121 (59.3%) for more than one year.

Eighty-five of the athletes (41.6%) reported that they had had one or more types of injuries resulting from this sport.