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Assessing the value of two functional tests as predictive factors of ankle sprain in rugby players
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Keywords: Assessment; Prevention; Sprain; Ankle; Rugby; Physiotherapy

Introduction.– Ankle sprain is one of the most common injuries in sports including rugby. A prevention policy is needed to avoid deterioration of the health of athletes and reduce costs. Thus, determining a risk factor is a target. To our knowledge no study has examined the performance of dynamic factors such as functional tests. However, it has already been proven that a deficit of postural balance increases the risk of developing a sprain in basketball players.

Objectives.– The purpose of this study was to evaluate whether poor performance in two functional tests unipodal was linked to increased incidence of ankle sprain in four months.

Methods.– Eighty-three rugby players in 4 teams in the elite amateur championships (federal 1 and 2) were evaluated and followed for 6 months. We recorded the time (in sec.) in two tests, the figure-of-eight hop test (F test) and side-hop test (S test) in September. During part of the sports season, until the following February (22 weeks), the occurrence of sprain was noted. At the end, two groups were formed (sprain vs non-sprain). The initial performance tests were compared using non-parametric tests.

Results.– Finally, 11 (13.25%) of the 83 players had a sprained ankle. Statistical analysis revealed that their time tests were not significantly different from those who were not injured.

Discussion.– Lack of data does not lead to a definitive conclusion, but it seems that the tests are not suited for rugby players. There should be more specific tests for this sport.


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The fate of muscle and tendon injuries of the lower limb in athletes treated in a physical medicine and rehabilitation department
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Keywords: Muscle injuries; Tendinopathy; Sport; Rehabilitation

Objective.– To study the epidemiological characteristics and outcome of muscle and tendon injuries of athletes attending a physical medicine and rehabilitation (PMR) consultation.

Patients and methods.– Retrospective study of medical records kept between 2006 and 2011. Variables analyzed were epidemiological, clinical and prognostic.

Results.– We identified 23 cases of muscle or tendon damage of the lower limb in athletes. These were 18 men and 5 women with a mean age of 24.3 ± 6.4 years. Sixteen were practicing sports at the amateur level and 7 at the professional level. Injuries occurred during training in 10 cases, and during a match in 13 cases. There are 10 muscle injuries, 11 tendinopathies and 2 partial tendon ruptures. The muscles injured were hamstrings (3 semimembranosus and 3 biceps femoris), quadriceps (1 rectus femoris and 1 vastus medialis), popliteus (1 case) and gastrocnemius (1 case). The injured tendons are those of the adductors (7 cases), hamstrings (1 case), the extensor hallucis (1 case), the popliteus (1 case) and Achilles (1 case). Ultrasound was performed in 14 cases. The treatments prescribed were analgesics (18 cases), NSAIDs (16 cases) and rehabilitation (22 cases) with an average of 16.5 sessions per patient.

The average duration of sporting rest was 28 days. Twenty-one patients resumed their sports activities at the same level including professional athletes.

Discussion.– The diagnosis of muscle and tendon injuries of the athlete is essentially clinical. Imaging is required to confirm and assess their severity in order to better guide treatment in the tenacious forms and in case of professional sports. PMR management allows athletes to the return to the same level of sports practice. We emphasize the need to restore the contractile qualities and flexibility of the muscles affected.

Further readings

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Prevalence of injuries among a team of Tunisian female soccer players
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Keywords: Sport; Soccer; Women; Muscle; Injuries; Tendinopathies

Objective.– To assess prevalence of traumatic injuries among a Tunisian team of female soccer players.

Subjects and methods.– A questionnaire was proposed to 20 females soccer players practicing in a second division team. Evaluation interested the period of the first half of a sport season.

Results.– The mean age was 19.3 years ± 3.2 years, the age of starting exercise was 15.9 years. The fifteen students practiced sport an average of 7.5 hours per week, whereas the others exercised 4.5 hours per week. The majority of our sportswomen were injured at least once during the evaluation period. The tendinopathies and muscle injuries were identified in 18 cases. Nine cases of sprain were noticed (2 cases of knee sprain and 7 cases of ankle sprain) and 2 cases of fracture. Eight players had to suspend their activity for a mean period of 5 weeks.

Conclusion.– The high frequency of traumatic injuries among our population can be explained by the absence of feminine soccer tradition in our country and by an inadequate training and life style.

Reference

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Prevention of patellar tendinopathy in French junior volleyball players
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Introduction.– Patellar tendinopathy is a frequent issue in sports with impulsion, typically in Volleyball (prevalence of 40% in some studies). This injury is hard to heal without a prolonged rest associated with many physical therapeutics. This is why prevention is a crucial point for this condition. Thanks to a systematic review of literature we pointed out main risk factors which can be reduced by preventive interventions.

Objective.– To evaluate the effectiveness of a pre-season battery of clinical tests and complementary explorations to predict the risk of patellar tendinopathy.

Materials and methods.– We proposed a pre-season testing for the Volleyball players from the “Pôle France” and the “Pôle Espoir de Montpellier” (30 players) to identify players with the highest risk of patellar tendinopathy. These tests included a standardized physical examination (extensibility, past injuries, anthropometric factors), an ultrasonography and power duplex Doppler of the patellar tendon (structural tendon changes and neovessels), an isokinetic test