

bipodal data eyes open at 6 months post-surgery, but a persistent strength deficit on the ankle periarticular muscles, mainly on the eccentric mode. The inclusion of a larger number of patients may allow confirming these trends, and providing a basis to personalise rehabilitation protocols and choose the most relevant.

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The relationship between body composition and injuries in elite Romanian rugby players

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Keywords: Body composition; Elite rugby players; Injuries; High-intensity exercise

Background.– The rugby effort is intense and depends on the playing position. To optimize fitness, but especially to reduce the risk of injuries, the body composition particularities must be properly understood.

Methods.– Thirty-seven senior male rugby players from Romanian champion team were assessed on body composition using InBody 720 Analyzers. We compared the results from the pre-season and in-season 2012 with the international norms for elite players categorized into positions.

Results.– We have analyzed the weight of lean muscle tissue in each limb, the body's water content, percentage of body fat, bone mineral and protein content. We observed that the number of injuries is directly correlated with high levels of body fat percentage and low lean muscle mass.

Discussion.– Risk of injury can be identified in elite rugby players not only using fitness tests, but also using an objective and simple test body composition. These results show how important is to monitor the level of body fat, lean muscle mass and muscular development in order to modify the food-habits, individualized trainings and reduce the number of injuries.

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A functional ankle instability after a ruptured popliteal cyst. A case report

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Keywords: Chronic ankle instability; Peroneal nerve; Popliteal cyst
Medical history taking, physical examination including repeated isometric test and neurological examination are primordial during a consultation related to functional ankle instability.

We present an unusual case report highlighting this assumption. A 37-years-old sporty man has been complaining of functional ankle instability for few months. In our case, the first consultation allowed to diagnose a possible neurologic disease. The weakness of muscles innervated by the peroneal nerve demonstrated during repeated isometric tests lead to an electromyogram. The exam confirms this hypothesis. Additional examinations (knee ultrasonography & MRI) allowed finding out a ruptured popliteal cyst with an oedema filling the whole popliteal space.

It is during a new consultation and thanks to a new patient history, taking that the relationship between the functional instability and the ruptured cyst has been discovered. Popliteal cyst rupture is not a cause described in literature explaining the ankle instability. Nevertheless, this diagnosis has been made possible.

sis and also thanks to a treatment associating proprioception work, muscular reinforcement, muscles stretching exercises and local anti-oedema cares.

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New field of application of radial shock wave therapy - osteoarthritis

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Keywords: Osteoarthritis; Radial shock wave therapy
ESWT is a treatment of choice in patients with chronic tendinopathies. There is good level of evidence about its effectiveness in the treatment of calcifying tendinopathy of the shoulder and Achilles tendinopathy, and moderate – in epicondylitis and plantar fasciitis, that are discussed by the author, who shares also own experience in its application in chronic musculoskeletal disorders. Experimental and clinical studies in animals have found good results after the application of ESWT in osteoarthritis.

Objectives.– The aim of our study was to investigate the effect of radial shock wave therapy (RSWT) in patients with knee osteoarthritis.

Methods.– The study included 107 cases with knee OA, randomized into three groups: study group (with 3 sessions of RSWT), placebo group (sham SWT) and control group (with standard PRM program: exercise, interferential currents and pulsed magnetic field). Visual analogue scale and Knee injury and osteoarthritis outcome score (KOOS) were used for assessment before treatment, after it, 1 month (mo) and 3 mo later.

Results.– We found statistically significant improvement in the mean values of pain (VAS) and KOOS in the study group (from 51.3 ± 3.2 to 68.6 ± 3.3 after treatment; 71.2 ± 3.3 at 1 mo; 69 ± 3.6 at 3 mo) and control group (from 59.2 ± 2.3 to 63.4 ± 2.2 ; 65.1 ± 2.1 at 1 mo; 64.7 ± 2.2 at 3 mo). The results in the study group were significantly better regarding the improvement in pain ascending and descending stairs and in KOOS (40.6% in study vs. 10.2% in control group at 3 mo). No significant difference in pain, functional outcomes and KOOS was found after sham application.

Conclusion.– Osteoarthritis is a new field of application of RSWT that give promising results.

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Interest on an isokinetic evaluation regarding prevention of lower extremities strains for professional football players

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Objectives.– The objective was to propose a prevention protocol based on the results of an isokinetic evaluation.

Methods.– During the pre-season, league 2 players of Châteauroux were submitted to an isokinetic assessment knee on Cybex Norm concentric mode ($60^\circ/\text{sec}$ and $240^\circ/\text{sec}$) and eccentric ($30^\circ/\text{sec}$). In case of muscular imbalance $>20\%$ of abnormal mixed ratio <0.6 and/or agonist/antagonist <0.45 , players were offered a personalized prevention protocol. The study focused on the seasons 2010–2011, 2011–2012 with prospective collected injury.