dopinqin bir neçə aspekti, dopinqə dair fikirlərdə öz nəticələrini göstərdilər. İdmançıların əksəriyyəti daha çox məlumatlı idi, çünki peşələri ilə maraqlanır və sağlam yolla qalib gəlir.

Açar sözlər: Azərbaycanda dopinq, idmançıların xəbərdarlığı, qadağan olunmuş siyahı

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УРОВЕНЬ ОСВЕДОМЛЕННОСТИ СПОРТСМЕНОВ ОБ АНТИДОПИНГОВЫХ ПРАВИЛАХ

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Аннотация. Как представляется, основным источником информации для спортсменов являются тренеры. Врачи и другие эксперты, похоже, не выступают в качестве ведущих консультантов. Антидопинговые правила все больше известны спортсменам, но все еще ощущается нехватка знаний, которые следует исправить с помощью соответствующих образовательных программ. Тем не менее, есть также много информации, которая должна быть исправлена посредством эффективных образовательных программ. [1] Реформы в области грамотности спортсменов в различных видах спорта неоспоримы, учитывая исследования под эгидой WADA, но, несмотря на это, недостаточная осведомленность и осведомленность спортсменов о допинг-контроле в настоящее время является одной из центральных проблем современного спорта. Так как применение допинга спортсменами не только наносит вред их здоровью, но и подрывает основы спорта. И согласно результатам нашего опроса, спортсмены, участвующие в опросе, показали свои собственные результаты в разделах запрещенного списка, нарушение антидопинговых правил, знание о допинг-агентах, допинг-контроль, несколько аспектов допинга, мнение о допинге. Большинство спортсменов были более информативными, потому что они заинтересованы в своей профессии и побеждают со здоровым образом.

Ключевые слова. допинг в Азербайджане, осведомленность спортсменов, список запрещенных средств

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PATELLOFEMORAL PAIN SYNDROME

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Annotation: Patellofemoral pain syndrome (PFPS) is a clinical condition that is characterised by retropatellar and/or peripatellar pain related to activities involving lower limb loading (eg, walking, running, jumping, step mounting, and prolonged sitting and motility,walking down stairs, squatting. Patellofemoral pain syndrome (PFAS) is a common cause of anterior knee pain, often affecting young women. Patellofemoral pain, approximately 9-10% of all musculoskeletal complaints. It is one of the most common musculoskeletal diagnoses that make up 20-

40% of knee problems. Patellofemoral pain, which was believed to be caused only by patellofemoral sequence disorder in the past, is considered as a complex and multifactorial problem today. Patellofemoral anamnesis, clinical and radiological findings should be evaluated together in the evaluation of patients with joint pain. Although there is still no clarity in the diagnosis of PFAS, the theory of tissue homeostasis, which suggests that the burden on the load on which it will resist tissue impairs tissue homeostasis and consequently the formation of pain, is gaining popularity. The amount of this resistance can vary depending on the person's characteristics (obesity, gender, sports, genetics, etc.).

Keywords: Patellofemoral joint, Anterior knee pain, Physiotherapy, Physical therapy, Orthosis, Vastus medialis obliquus, Quadriceps, Treatment, Outcome measures, Brace, Patellar tape, Patellofemoral pain syndrome.

Introduction : Patellofemoral pain syndrome (PFAS) is a common knee problem among young, physically active individuals (1-3). It occurs most frequently in women, athletes and soldiers PFAS accounts for approximately 9-10% of all musculoskelatal complaints and 20-40% of all knee problems. In literature, PFPS is more common in women. Anatomic, postural and social factors such as pelvic width, wearing high-heeled shoes or sitting cross-legged are emphasized as the most common reason in women.

Terminology: Patellofemoral pain is defined as retropatellar or peripatellar pain resulting from physical and biomechanical changes in the patellofemoral joint.Patellofemoral pain syndrome was first described by Aleman in 1928.

“Patellofemoral syndrome”, “patellofemoral arthralgia”, extensor mechanism dysplasia ”,“ retropatellar pain syndrome ”,“ lateral patellar compression syndrome ”,“ patellofemoral dysfunction ”,“ anterior (anterior) knee pain ”and“ patel Syndrome ”is used to describe patellofemoral pain, but these names are not widely accepted

it is usually due to these supporting structures, so the term “anterior knee pain is often used instead of patellofemoral pain syndrome. The terms both anterior knee pain and patellofemoral pain syndrome should be distinguished from the term “chondromalacia characterized by softening and fibrillation of the patellar cartilage surface that can only be seen by surgery. Chondromalacia is not a diagnosis but a surgical finding. Many patients with patellofemoral pain syndrome there are no chondromalacia and many chondromalacia patellofemoral pain syndrome is not seen in the patient

Anatomical and Biomechanical of Patellofemoral Joint Properties: The patellofemoral joint (PFE) protects the anterior part of the knee and provides mechanical support to the quadriceps muscle, an important part of the knee extensor mechanism. Patella knee extension strength up to 50% can improve. During full extension of the knee, the patella sits laterally to the trochlea. During flexion, the patella moves medially and is in the intercondylar notch up to 130 degrees flexion, then again laterally begins to move. The mediolateral movements of the patella are controlled by the quadriceps muscle, especially the vastus medialis obliquus (VMO) and vastus lateralis (VL). As the knee flexion increases, the larger articular surface of the patella comes into contact with the femur, which is offset by increased load during flexion. Patellofemoral insertion, half of body weight during walking, 3-4 times of body weight when climbing stairs, squatting 7-8 times the body weight during the jump, and about 20 times the body weight during the jump load. Anatomically, the lateral structures of PFE are stronger than the medial structures, so any imbalance between forces may cause the patella to shift laterally. For optimal knee function, the PFE sequence should be normal. The movement of the patella is provided by the static and dynamic forces acting on the patella, the suitability of PFE surfaces, the alignment and biomechanical properties of the lower extremity. The lateral and medial retinaculum and the bone structure of the trochlea form static forces. The lateral retinaculum is stronger and creates a force that pulls the patella laterally. The primary structure

that creates dynamic force on the patella is the quadriceps muscle. In addition, the tensor fascia lata and gluteal muscles adhere to the iliotibial band and the iliotibial band has a strong facial connection with the lateral retinaculum; thus, they form a dynamic force on the patella.

In 1968, Lieb and Perry described the vastus medialis muscle as being composed of two parts, the vastus medialis obliquus (VMO) and the vastus medialis longitudinalis (VML). Hubbard and colleagues in 1997, 374 cadaveric lower extremity VMO and VML muscles were not separated in terms of anatomic and functionality, but the average angle of the femoral axis of VML fibers is 14.6 °, while the femoral axis of VMO fibers is 53.2 ° angle and found that they made.22 Zappala and colleagues in 1992, McConnell in 2002 with his study of the patella in the femoral groove VMO showed normal anatomical alignment.16 Patella during the last 20-30 ° knee extension of the VMO primary dynamic stabilizer. This angle is also the angle at which patellofemoral pain occurs most. However, the anatomopathological study by Lieb and Perry,terminal knee extension not only by VMO, but by all vastus.

In the literature, patellofemoral pain syndrome is frequently associated with the difference in the activation patterns of VMO and VL muscles.Owings and Grabiner found that there was a difference between the activation time of VMO and VL muscles but this was not statistically significant. According to this difference, the activation amplitude of the VL muscle during contraction was greater than that of the VMO muscle. When patients with patellofemoral pain syndrome and healthy individuals compared the activation time of VMO and VL muscles, they found that the activation amplitudes of both VMO and VL muscles were significantly higher in patients with patellofemoral pain syndrome compared to the control group. and Gross have also demonstrated that VMO / VL activation patterns of individuals with patellofemoral pain syndrome may be different from healthy individuals and that this can be explained by biomechanical factors that may be the cause of patellofemoral pain syndrome . Gerber et al. compared that they are easier to atrophy, pain and effusion in the presence of more easily inhibited.

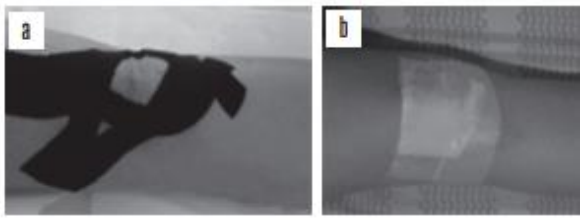
Q angle: The alignment and biomechanical properties of the lower extremity also affect patellar movements. A normal knee has a slightly valgus angle because the quadriceps tendon pulls the patella laterally at the last 30 degree knee extension and causes the patella to tilt. This is called the valgus rule and is known as the quadriceps angle (Q angle). The angle Q is measured as the angle between a line drawn from the anterior superior iliac spin to the midpoint of the patella and the line drawn from the midpoint of the patella to the tibial tubercle. The larger Q angle indicates that the patella is pulled more strongly laterally. The forces that resist this lateral traction are the medial retinaculum, the VMO and the lateral bone overhang of the trochlea. The normal Q angle is 8º-12º for men and 15º-18º for women. Biomechanical factors associated with increased Q angle genu valgum, femoral anteversion, external tibial torsion and subtalar joint pronation.

Treatment of Patellofemoral Pain Syndrome: According to the current literature, conservative approaches should be preferred before the invasive approach in the treatment of patellofemoral pain syndrome. Stretching shortened structures such as lateral retinaculum, VMO reinforcement, modification of activities, biofeedback, neuromuscular electrical stimulation, therapeutic ultrasound, thermotherapy, knee supports, foot orthoses and suitable shoe selection methods.

Pain Reduction: Reducing the patient's pain should be the primary goal of treatment. Avoiding pain-aggravating activities, ice administration, use of non-steroidal anti-inflammatory drugs, electrotherapeutic modalities, mobilization techniques, dry needling and either acupuncture or a combination of some of these may be used to reduce pain. Taping methods also have pain reducing effect.

The Most Commonly Used Conservative in the Treatment of PFAS : Taping Techniques:

Taping has been preferred as a treatment method in physical therapy and rehabilitation applications for many years. There are 3 types of banding generally accepted in the literature. These include athletic banding, McConnell banding and Kinesio® banding. (White Athletic Taping, McConnell Taping Technique, and Kinesio® Taping) (Figure 1)



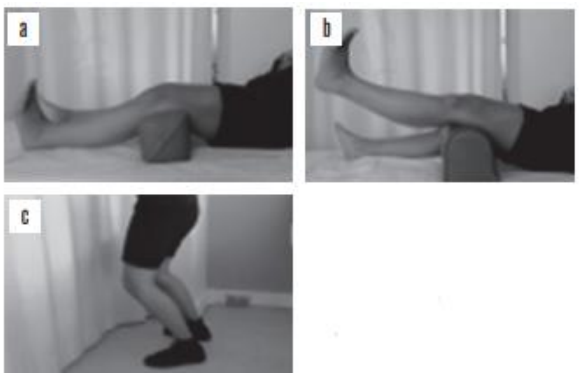
Exercises: Quadriceps muscle strengthening exercises are an important factor in the treatment of patellofemoral pain syndrome. In the available information in the literature, a particular exercise to strengthen the quadriceps muscle is not superior to others. However, in many patients, general strengthening exercises for the lower extremity muscles help reduce pain and functional disability .(Fiqure 2)

Strengthening the whole muscle structure of the affected lower limb reduces the strain on the patella. In literature, it has been shown by Gilleard that patients with PFPS have weaker VMO than other parts of the quadriceps muscle and that the firing patterns of nerves innervating VMO and VL are not normal. Owings and Gabriel's work in the literature, PFAS showed that the amplitude patterns of activation for both VMO and VL were longer than in normal patients. The study showed that the difference between the activation timing between VMO and VL was higher than in healthy subjects . This imbalance between the medial and lateral parts of the quadriceps muscle may cause disruption of the patella's sliding movement in the femoral groove. Due to its important role in the movement of the patella, strengthening of the quadriceps muscle, and more importantly strengthening the VMO, is considered the mainstay for the treatment of PFS.

In recent years, isokinetic quadriceps training has been proposed to strengthen the quadriceps muscle. Isokinetic training provides both optimal load on the muscles and allows muscle performance at different speeds. At high angular speeds, compressive forces on the articular surface are reduced, so high angular velocity (≥120 ° / s) is recommended in patients with PFPS in concentric studies.

Increasing the flexibility of the lateral soft tissues helps to normalize the patella in the femoral groove; for this, it is very useful to stretch the lateral shortened tissues such as the lateral retinaculum. Best stretching position while the knee is flexed. Using the hand base, the patella is shifted medially. Other simple stretching methods can be taught to the patient. In patients with PFAS, the power of the hip abductor and external rotators has been shown to decrease with quadriceps. It is known that retraining of hip abductors and external rotators, as well as quadriceps strengthening exercises, will help stabilize the lateral pelvis and control the internal rotation of the hip, which has been shown to be useful in reducing pain in patients with PFPS. These exercises are initially performed in positions where there is no weight transfer, and as the rehabilitation process progresses, weight transfer positions can be started. If possible, the patient can be taught combined exercises that enable the hip abductors and external rotators to activate the VMO simultaneously. These exercises ensure that the hip is in the correct alignment during weight transfer (up and down stairs) while the knee is flexed.

However, eccentric exercises are more difficult to perform, involve decelerating movements and require coordinated work of different parts of the quadriceps muscle. For these reasons, eccentric studies at 90 ° / s or less are recommended in PFAS.



As a result; In the treatment of patellofemoral pain syndrome, conservative approaches should be preferred before invasive approach. For each patient, factors that cause pain should be identified with a detailed evaluation and a special treatment program should be chosen accordingly.

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PATELLOFEMORAL AĞRI SINDROMU

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Annotasiya: Patellofemoral ağrı sindromu (PFPS), aşağı ətrafların yüklənməsi ilə əlaqəli retropatellar və / və ya peripatellar ağrısı ilə xarakterizə olunan klinik vəziyyətdir (məs., Gəzinti, qaçış, atlama, addım montajı və çox oturma və hərəkətlilik, pilləkənlə aşağı düşmək, çömbəlmək) . Patellofemoral ağrı sindromu (PFAS), ön diz ağrısının yaygın bir səbəbidir, tez-tez gənc qadınlara təsir göstərir. Patellofemoral ağrı, bütün əzələ-skelet şikayətlərinin təxminən 9-10% -ini təşkil edir. Diz problemlərinin 20-40% -ni təşkil edən ən çox yayılmış əzələ-skelet diaqnozlarından biridir. Keçmişdə yalnız patellofemoral

ardıcıllıqla pozulma səbəb olduğu düşünülən Patellofemoral ağrı bu gün mürəkkəb və multifaktorial problem olaraq qəbul edilir. Patellofemoral anamnez, klinik və radioloji nəticələr birgə ağrı olan xəstələrin qiymətləndirilməsində birlikdə qiymətləndirilməlidir. PFAS diaqnozunda hələ bir aydınlıq olmasa da, toxuma müqavimət göstərəcəyi yükün toxuma homeostazını pisləşdirdiyini və nəticədə ağrı meydana gəlməsini təklif edən toxuma homeostazı nəzəriyyəsi populyarlıq qazanır. Bu müqavimətin miqdarı şəxsin xüsusiyyətlərindən (obezlik, cinsiyyət, idman, genetika və s.) asılı olaraq dəyişə bilər.

Açar sözlər: Patellofemoral oynaq, ön diz ağrısı, fizioterapiya, ortez, vastus medialis obliquus, quadriseps, müalicə, nəticə tədbirləri, , patellar bantlama, patellofemoral ağrı sindromu.

A DESCRIPTIVE STUDY COMPARING THE FOOT AND ANKLE STRUCTURE AND DYNAMICS IN CHILDREN WITH CEREBRAL PALSY AND CHILDREN WITHOUT CEREBRAL PALSY

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Annotation. This study will conduct to investigate the effects of foot and ankle characteristics on balance and function in children with Cerebral Palsy and healthy children. A total of 37 children; 17 healthy subjects and 20 children who diagnosed with Cerebral Palsy will included in the study. All of the childrens' foot postures will determine with the foot posture index, navicular drop test, navicular height and arc height ratio calculation. In addition to these procedures, static and dynamic pedobarographic analysis will performe. Postural sway will measure on the stabilometric platform. Balance and functional performance will measure by using; the pediatric balance scale, pediatric reach test and timed performance tests such as the tind up and go test, time up-down stair test, ten meter walking test will performe. The differences of these parameters between two groups and the relationship between foot posture parameters, balance and functional tests will investigate.

Key words. Cerebral palsy, foot characterics, balance, mobility

Introduction. CP is a congenital condition in which there is a motor disability (palsy) caused by a static, nonprogressive lesion in the brain (1). Motor impairment is often accompanied by sensory, cognitive, communication, behavior, perception problems, secondary musculoskeletal disorders and epilepsy .
Many Cerebral Palsy classification systems are used today and the same child may be classified differently at different times, by different people, and in different regions.
Traditional classifications of CP based on multiple variables. CP subtypes based on the Swedish classification (1989) are spastic (hemiplegic, tetraplegic, and diplegic), dyskinetic (dystonic and athetotic), ataxic and unclassified/mixed.Spastic type CP characterized by increased muscle tone is the most common clinical picture .
Topographic classification relies on the localization/limb distribution of neuromotor impairment in spastic CP. It subdivides spastic CP into: quadriplegia (symmetric/equal and severe spasticity of all four limbs), diplegia (involvement of the four limbs but greater spasticity and weakness in the lower limbs) and hemiplegia (involvement of the upper and lower limbs on one side of the body) Hemiparetic type SP is the type in which the lower and upper extremities of a body half are affected.In patients with hemiparetic CP, spasticity, weight transfer problems to the affected side, balance problems caused by problems such as insufficient heel stroke, inequality in step length, decreases in the