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Efficacy of Deep Friction Massage Cyriax Techniques in Patello Femoral Pain Syndrome or Anterior Knee Pain in Geriatric Patients

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ABSTRACT

Patella-femoral pain syndrome (PFPS) is common cause of anterior knee pain the purpose of this article is to review knee anatomy and the literature regarding potential risk factors associated with patella- femoral pain syndrome and pre-rehabilitationstrategies.39to40% of patients still experiencing symptoms after a year of followup, recurrence is c ommon.When symptoms continue after six months of conservative therapy and when clear malalignments are found, s urgical intervention should be taken into consideration A comprehensive review of knee anatomy will present the relationships of arterial collateralization, innervations, and soft tissue alignment to the possible multifactoral mechanism involved in PFPS, while attempting to advocate future use of different treatments aimed at non-soft tissue causes of PFPS.

1. INTRODUCTION

Anterior knee pain or patella-femoral pain syndrome (PFPS) is one of the most common disorders affecting the lower extremities. it frequently occurs among the physically active population, and its incidence is higher among women and athletes . A commonly accepted hypothesis for the etiology of PFPS is based on excessive patella-femoral joint pressure secondary to poor patellar tracking.[1]There are six major anatomical structural source of patellao-femoral pain subchondral bone, synovium, retinaculum, skin, muscle and nerve.PFPS is painful disorder of the knee joint that affects daily living activities and cause functional disabilities. PFPS is one of the most prevalent knee conditions in adolescent and young adoults.[2] The etiology of this condition remains unknown, although many intrinsic and extrinsic factors have been suggested.[3] with respect to the etiology of PFPS there is growing empirical evidence that impaired muscular control of the hip can affects patella-femoral joint kinematics and kinetics in multiple planes.[4] PFPS is an overuse disorder that involves the patella-femoral region and often presents as anterior knee pain and excludes other intra articular pathology.[5] The joint is considered to be the least congruent joint in the body.[9] which has a complex articulation that depends both dynamic and static restraints for stability.[5]

Knowledge of the anatomy of patella-femoral joint is essential to developing an understanding of pathogenesis of PFPS.[6] The joint is formed by a triangular shaped patella and the femoral surface on which it sites and is considered to be the least congruent joint in the body.[7] the patella, largest sesamoid bone in the human body, function to improve flexion efficiency and to protect the tibio-femoral joint .[8] which has a complex articulation that depends on both dynamic and restrains for stability .[6] The medial restraints consists of the medial retinaculum, the medial restraints consist of the medical patella-femoral ligament and VMO (vastus medialis obliques).[10] As the patella is not completely engaged in the patellar groove during the first 0-30 degrees of flexion, instability and a mechanism to reduce friction between the quadriceps tendons and the femoral condyles . Second it allows a wider distribution of compressive stress on the femur by increasing the area of the contact between the patella tendon and the femur. The patello-femoral joint is unique in that it protects the body's other joints by the way it distributes shock loadings in the knee. First, compressive forces from the femur are absorbed by the patella. Then, rather than being transferred directly as a compressive load, these forces are transformed into tension forces in the quadriceps femoris and patellar tendons In an effort to support the future use of various treatments targeted at non-soft tissue causes of PFPS, a thorough analysis of knee anatomy will present the relationships between arterial collateraliza tion, innervations, and soft tissue alignment to the potential multifactoral mechanism involved in PFPS[13]

Anterior knee pain or patella-femoral pain syndrome (PFPS) is one of the most common disorders affecting the lower extremities. it frequently occurs among the physically active population, and its incidence is higher among women . A commonly accepted hypothesis for the aetiology of PFPS is based on excessive patella-femoral joint pressure secondary to poor patellar tracking.[1] PFPS is painful disorder of the knee joint that affects daily living activities and cause functional disabilities. PFPS is one of the most prevalent knee conditions in adolescent and young adoults.[2]

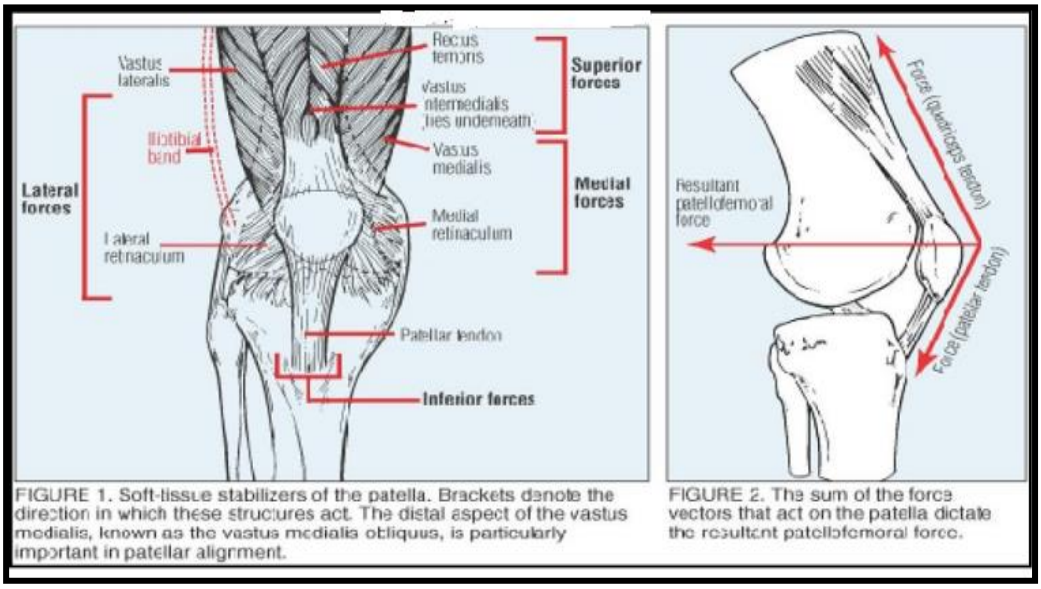

FIGURE 1. Soft-tissue stabilizers of the patella. Brackets denote the direction in which these structures act. The distal aspect of the vastus medialis, known as the vastus medialis obliquus, is particularly important in patellar alignment.

FIGURE 2. The sum of the force vectors that act on the patella dictate the resultant patellofemoral force.

Fig-Soft tissues of patella

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2. DIAGNOSIS

Some imaging test can help find knee pain. Test might include:

X-ray. X-ray image show bones well. X-ray aren't as for viewing soft tissue, CT Scan: Ct scan shows bone and soft tissues but CT scans involve a much higher dose of radiation than plain X-ray MRI using radio waves and a strong magnetic field Ultrasound sound waves used to image of muscle and tendon.

3. TREATMENT

Treatment of the patella femoral pain often begin with simple try not to do things that increase the pail such as climbing stairs, kneeling or squatting. rest the knee as much as possible.

4. MEDICINE

If needed take pain reliever medicine likes acetaminophen, ibuprofen, and Naproxen sodium.

Therapy: Physiotherapy include Rehabilitation exercises, muscle strengthening exercises,Supportive braces,Taping,Icing,Orthotics, and surgically Arthoplasty,Realignment are important for the patella syndrome

5. CONCLUSSION

The primary causes of patellofemoral discomfort are abnormal tracking and patella malalignment. The majority of affected athletes are young females, and recurrence rates are significant. Muscular tests and radiographic measurements are typically required for the diagnosis. Muscle balance and strength must be the main goals of the treatment.

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