Patellofemoral Joint Pain

For information on all types of injuries visit: http://www.cssphysio.com.au/Doctors/fordoctors.html



Latest Research

The following information is taken from two papers published in the May 2017 edition of *In Touch Musculoskeletal Physiotherapy* magazine. The references are provided below.

Long term studies are now available, which show a strong link between persistent patellofemoral pain (PFP), and patellofemoral joint osteoarthritis (PFJ OA). And it is recognised that PFJ OA is more common than, and creates greater pain and functional deficits than tibiofemoral arthritis. PFJ OA may also be an important precursor to tri-compartmental knee OA.

Patellofemoral Pain

This is defined as pain in or around the patella, which is aggravated by patellofemoral loading activities (stair climbing, squatting, running, jumping, prolonged sitting). This is a significant problem amongst young and active individuals. It is a condition that is frequently persistent, with between 40% to 90% of individuals suffering recurrent or ongoing symptoms.

Risk factors for the development of PFP are thought to include:

- Patellofemoral dysplasia & patella alta
- Increased patellar tilt
- Poor biomechanical control of gait / landing, which may in part be related to the following:
- Quadriceps weakness
- Hip abductor weakness
- Limited ankle joint ROM & increased midfoot ROM.

Patellofemoral Joint OA

A diagnosis of PFJ OA is made when there is the presence of PFJ symptoms (regular pain with PFJ loading activities), and positive radiographic findings (osteophytes or joint space narrowing).

Prevalence:

- This condition affects up to 25% of the general population 20 years or older.
- In patients 20 years or older with persistent knee pain, up to 40% have PFJ OA.
- 25% of people aged 26-50 years with PFP had established PFJ OA.
- Around 70% of middle aged and older individuals with persistent knee pain were found to have PFJ OA.

Risk factors for developing PFJ OA include:

- Presence of persistent PFP (thus the risk factors for PFP may apply to PFJ OA).
- Age greater than 40 years
- Presence of PFJ crepitus
- Previous knee surgery
- Previous PFJ trauma
- High BMI

Management of PFJ OA

Research has shown that multimodal physiotherapy is effective for short-term improvement in outcomes in people with PFJ OA. This management included:

- Strengthening for the quadriceps & hip muscles.
- Neuromuscular retraining, targeting better functional loading through the limbs
- Manual therapy including massage & PFJ

mobilisation

- Patellofemoral taping.
- Education

References:

- 1. Collins, N (2017). Patellofemoral pain & OA. <u>In Touch</u>, Issue 2, 20-21.
- 2. Tan, J et al (2017). PFJ OA how can I help my patient? <u>In Touch</u>, Issue 2, 18-19.

For information for doctors on physiotherapy management of all types of injuries visit: <u>http://www.cssphysio.com.au/Doctors/fordoctors.ht</u> <u>ml</u>

Information for patients is at: http://www.cssphysio.com.au/forpatients.html



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