## 前膝痛家居護理 Anterior Knee Pain Home Advice





膝蓋屈曲或伸直膝部時,會在凹陷的滑軌處滑行 當膝蓋不正常的滑動時 膝蓋底部的壓力增加,引致疼痛及腫脹

前膝痛通常都是由於膝蓋的生物力學出了問題。膝蓋位於大腿骨末端的凹位內。屈曲或伸直膝部時,膝蓋會在凹陷的滑軌處滑行。當膝蓋不正常的滑動時,膝蓋底部的壓力增加,引致疼痛及腫脹。

#### 大腿骨往內旋轉太多引致前膝痛

一般而言,膝蓋不正常的滑動都偏向外側。以前認為這是由於大腿外側肌肉拉力過強而引致的。最近,學者才發現問題是因為臀部的肌肉乏力,令大腿骨往內旋轉太多所致。

#### 要促進復康,我們有以下建議:

- 冷敷30分鐘(注意時間不要過長)
- 選用處方矯形鞋墊去改善腳外翻的情況
- 配帶護膝以承托及穩定膝蓋
- 可以做伸展運動,伸展:
  - 大腿四頭肌
  - 大腿後肌(股二頭肌)
  - 小腿(腓腸肌、比目魚肌)

#### 強化臀部外旋肌肉運動

即仰臥。頭、頸、脊骨保持中立位,兩腳並排用治療橡筋圍繞著腳板中部。呼氣時把腳分開到和盆骨一致的潤度,然後雙膝向外旋轉致極限,保持姿勢約三秒。然後放鬆還原。重複三十次(若做不到三十次則盡量做)。如可以自如地完成,則可改用阳力更大的治療橡筋。

② 側臥。以手或枕頭支撐頭部, 保持頸腰脊骨於中立姿勢。在大腿 末端膝蓋的位置用治療橡筋繞一圈, 不要屈髋(0°);屈膝,腳板保持一 起,上面的膝蓋向外打開。維持這個姿勢5秒。 重複整套動作20至30次。然後,轉身做第二邊。



然後在另一側重複。

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Dolak KL et al. Hip strengthening prior to functional exercises reduces pain sooner than quadriceps strengthening in females with patellofemora pain syndrome: a randomized clinical trial. J Orthop Sports Phys Ther. 2011 Aug;41(8):560-70.



The knee cap glides during bending and straightening of the knee.

When the knee cap glides abnormally on the trough,

Pressure increases on the underside

Of the knee cap and pain and swelling result.

Anterior knee pain is usually due to biomechanical problems involving the knee cap. The knee cap sits on top of a depression (trough) in the thigh bone and glides on it during bending and straightening of the knee. When the knee cap glides abnormally on the trough, pressure increases on the underside of the knee cap and pain and swelling result.

# The thigh bone that rotates excessively inward causes anterior knee pain

Generally, the knee cap glides abnormally laterally in relation to the thigh. Previously, this was thought to be due to an excessive pulling force on the outside of the thigh. Recently, however, it was found that it was the thigh bone that rotates excessively inward. To facilitate recovery from anterior knee pain, you are advised to:

Apply cold pad for 30 minutes (avoid excessive cold)

 Have a pair of prescription custom made foot orthoses to correct the excessive foot pronation

 Wear a knee brace that supports and stabilizes the knee cap.

Perform exercises to stretch the:

- Quadriceps muscles
- Hamstring muscles
- Gastrosoleus

Perform exercises to strengthen the external rotatores of the hip

Lie supine, with the head and low back in neutral position. Bring the feet together and tie an elastic band around the middle of the feet. When breathing out, abduct the feet to the width of the pelvis and then externally rotate them. Hold for a count of 3, then relax and bring the feet back together. Repeat for 30 repetitions or tolerance. (If you can do significantly more than 30 repetitions, please switch to an elastic band with higher tension or double the band).

Hip Clamshell exercise – Lie on the side with the head supported in neutral position. Please a theraband loop on the distal end of the thighs. Start with the hip in neutral position (0° flexion). Open the superior thigh as much as possible as if a clam opens the shell. Maintain the position for 5 seconds and perform 20-30 repetitions. Change side and repeat the exercise.

Sit on the floor as in (a). Ensure that the supporting hand is slightly forward to that of the trunk. Breathe out and try to raise yourself up to a higher position (b). Hold for a count of 5. Rest and repeat for 30 repetitions or to tolerance. Do it on both sides, twice a day.