

# CAT

## Clinical Bottom Line(s):

**1. A combination of daily “McConnell approach” patella taping with a 4-week daily exercise program has been shown to be more effective than placebo taping and exercise or exercise alone in reducing pain and improving function in patients with PFPS.**

**Citations(s):** Whittingham M, Palmer S, Macmillan F. “Effects of taping on pain and function in patellofemoral pain syndrome: a randomized controlled trial.” *JOSPT* 2004; 34:504-510.

## Three/four part clinical question:

In military recruits with PFPS, does patellar taping facilitate faster return to full duty status?

**The study:** Single-blinded randomized controlled trial.

**The study patients:** Army recruits aged 17 to 25 with 2 of 4 inclusion criteria: pain on ascending/descending stairs, squatting, sitting for extended periods of time, or associated with an increase in physical activity.

Exclusion criteria: history of patellar subluxation/dislocation, ACL or PCL insufficiency, previous knee surgery or meniscal damage, or any other underlying musculoskeletal problems that would have prevented the subject from performing the exercises.

## Control Group(s):

Daily placebo taping and supervised exercise program (n = 10; 10 analyzed).

Daily supervised exercise program only (n = 10; 10 analyzed).

## Experimental Group

Daily McConnell approach patellar taping and supervised exercise program.

## The evidence:

A functional index questionnaire scored 8 tasks based on patients reports of “no problem” (scored 2), “can do with problem” (scored 1), and “unable to do” (scored 0), with perfect function of all tasks indicated by the maximum score of 16.

## FUNCTIONAL INDEX QUESTIONNAIRE SCORES (Mean +/- SD)

Time Period	McConnell Taping & Exercise	Placebo Taping & Exercise	Exercise Alone
Initial	7.6 +/- 1.0	7.8 +/- 0.8	7.7 +/- 0.8
Week 1	11.3 +/- 1.2*	10.3 +/- 1.1	10.0 +/- 0.8
Week 2	14.0 +/- 0.8**	11.6 +/- 1.0	11.3 +/- 0.8
Week 3	15.5 +/- 0.7**	12.5 +/- 1.3	12.7 +/- 0.9
Week 4	16.0 +/- 0.0**	13.5 +/- 1.1	13.5 +/- 1.0

\*Significantly better than exercise-alone group (P<.01).

\*\*Significantly better than placebo taping & exercise and exercise alone groups (P<.01).

## Comments:

1. Some training is required, the physiotherapist conducting treatment in this study had 5 years of experience using the McConnell approach.
2. Time intensive: taping and exercise supervision done every day for each subject by physiotherapist.
3. Study limited to four weeks, further follow-up results should be assessed.

Appraiser by: Paul Froehlich

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Kill or update by: 2007