

OSGOOD-SCHLATTER'S DISEASE: AN ACTIVE APPROACH USING MASSAGE AND STRETCHING

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Introduction: Osgood-Schlatter's disease (OSD) is a traction apophysitis of the tibial tubercle of the knee and tends to affect athletically active adolescents during their secondary growth spurts¹. It is a painful and extremely limiting condition and is the most common overuse injury in this age group². The current standard treatment is to allow the athlete to self-manage pain and activity levels, but the documented history of this condition records patients having to refrain from physical activity for an average of 21 months³. The object of this pilot study was to investigate the dual influence of myofascial release massage (MRM) and stretching of the quadriceps group on the speed of recovery of patients with OSD.

Method: 25 patients were referred for physiotherapy treatment for OSD (6 female, aged 11.6 ± 1.5 SD; 19 male, aged 13 ± 1.6). Onset of symptoms ranged from acute (1 week) to chronic (36 months) with an average of 8 months. Initial measurements of functional tendon loading using a standing wall slide test⁴ were taken for all subjects. This test was then repeated at regular intervals. MRM was performed daily for 2 minutes, either by the physiotherapist or parent who had been taught the technique. Once pain free knee flexion was achieved, active stretching was then performed daily by the patient instead of the MRM. Statistical analysis was performed to determine any significance between subsequent recordings using one-tailed t-tests.

Results: All patients achieved a full wall squat in an average of 20 days (± 12) with a maximum of 50. The improvement in wall slide was significant to 98% ($p < 0.02$) for each recording. Upon full wall slide patients were discharged and returned to their sporting activities as normal, with no reported further problems. At various follow-up dates (1-5 years) only 2 patients reported recurrence but they had not followed the recommended advice on stretching.

Discussion: In spite of the vagaries of adolescent and parent compliance, and the limitations of clinic appointments, these results indicate that MRM and stretching are likely to be an important intervention in the active treatment of this disabling condition. The patients in this study returned to their sport in a significantly shorter time than is usually anticipated with the traditional 'let them grow out of it' approach.

Keywords: Osgood-Schlatter, adolescent, knee injury, massage, stretching, apophysitis,

References.

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Keywords:

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TOPIC: REHABILITATION

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