

# ORTHOPAEDIC EVIDENCE

## NEWSLETTER

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## PERIPHERAL NERVE SHEATH TUMOUR

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- A 26-year-old female military officer directly accessed physiotherapy, relating a 4-month history of deep, intermittent left medial knee pain with running. She denied any previous history of lower extremity or back injury or symptoms
- She had medial joint line tenderness with full hip and knee ROM, hip abduction was 4/5 and the Thessaly test (medial meniscus) was positive for pain, gait was antalgic
- Initial diagnosis was medial meniscus tear and a program of hip and knee strengthening was initiated.
- After 6 visits over 4 weeks hip abduction strength was full but pain remained constant with a new symptom of night pain
- She was referred back to her physician and MRI was ordered revealing a peripheral nerve sheath tumour of the saphenous nerve within the gracilis
- Biopsy confirmed the diagnosis and the tumour was resected allowing symptom free return to running in 5 weeks
- ***Referral back to the primary care physician when physiotherapy treatment does not progress as expected and in light of constant and night pain is an important aspect of patient care to further diagnose symptoms of a non-mechanical nature***

Produced by the Clinical Staff at

## DOES ALTERED MANDIBULAR POSITION AND DENTAL OCCLUSION INFLUENCE UPPER CERVICAL MOVEMENT: A CROSS-SECTIONAL STUDY IN ASYMPTOMATIC PEOPLE

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- Gross mandibular position and masticatory muscle activity have been shown to influence cervical muscles electromyographic activity
- The purpose of this study was to investigate the influence of three different mandible positions: conscious occlusion, tongue tip against the anterior hard palate (palate tongue position) and natural resting position (Rest), on sagittal plane cervical spine range of motion (ROM) as well as the flexion-rotation test (FRT) in asymptomatic subjects
- Upon testing upper cervical ROM with the FRT, a significant decrease in ROM was seen when the subject was in conscious occlusion or the palate tongue position.
- **When assessing upper cervical ROM the clinician should be cognizant of having the mandible in the natural resting position**

## CERVICAL FLEXION-ROTATION TEST AND PHYSIOLOGICAL RANGE OF MOTION – A COMPARATIVE STUDY OF PATIENTS WITH MYOGENIC TEMPOROMANDIBULAR DISORDER VERSUS HEALTHY SUBJECTS

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- Temporomandibular Disorders (TMD) refer to several common clinical disorders which involve the masticatory muscles, the temporomandibular joint (TMJ) and the adjacent structures
- Neck signs and symptoms are found with higher prevalence in TMD patients compared to the overall population, but whether limitation of cervical mobility is an additional positive finding in this cohort is still an open question
- The purpose of this study was to compare the physiological cervical range of motion (CROM) and the extent of rotation during cervical flexion (flexion-rotation test, FRT) in women with TMD (muscular origin) and healthy control subjects
- Women with myogenic TMD had significantly lower FRT scores compared to their matched healthy women
- There was no statistically significant difference between groups in physiological Cervical ROM in all planes of movement
- The FRT was positive in 90% of the TMD participants versus 5% in the uninvolved control
- ***Women with myogenic TMD may have involvement of the upper cervical spine. The clinician is obligated to assess this area in order to direct treatment appropriately.***