

ORTHOPAEDIC EVIDENCE

NEWSLETTER

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IDENTIFICATION OF METASTATIC LESIONS IN A PATIENT WITH LOW BACK PAIN FOLLOWING A MOTOR VEHICLE COLLISION

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- A 58-year-old male referred to physiotherapy with a primary complaint of intermittent low back pain (LBP) 2 weeks post involvement in a motor vehicle collision.
- No red flags upon assessment justified the initiation of treatment.
- When symptoms of unrelenting LBP emerged, he was referred to his primary care physician with a request for further medical workup.
- Before this was performed, the patient presented to the ER with a urinary complaint; this, in combination with unrelenting LBP, prompted further imaging follow-up.
- Lumbar/thoracic spine MRI revealed multiple compression fractures and diffuse bone marrow heterogeneity consistent with a malignant infiltrative marrow process. The patient underwent additional laboratory testing and a bone marrow aspirate and biopsy that confirmed the diagnosis of multiple myeloma.
- ***Consistent monitoring for all red flags including constant, unrelenting pain and bowel or bladder changes is critical in physiotherapy to recognize these cases and refer on to their physician for appropriate testing.***



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THE INCREMENTAL EFFECTS OF MANUAL THERAPY OR BOOSTER SESSIONS IN ADDITION TO EXERCISE THERAPY FOR KNEE OA: A RANDOMIZED CLINICAL TRIAL

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- All participants had knee OA and were provided 12 sessions of multimodal exercise therapy supervised by a physiotherapist
- Participants were randomly allocated to 1 of 4 groups:
 - exercise therapy in consecutive sessions
 - exercise therapy distributed over a year using booster sessions
 - exercise therapy plus manual therapy without booster sessions
 - exercise therapy plus manual therapy with booster sessions.

Study Findings:

Significant benefit from booster sessions and manual therapy vs. exercise therapy alone

Exercise therapy with booster sessions and exercise therapy plus manual therapy had

superior effects compared with exercise therapy alone

Conclusions:

Distributing 12 sessions of exercise therapy over a year in the form of booster sessions was more effective than providing 12 consecutive exercise therapy sessions.

Providing manual therapy in addition to exercise therapy improved treatment effectiveness compared to providing 12 consecutive exercise therapy sessions alone.

Physiotherapists have a unique ability to provide each of these services to this subgroup of patients. Continually examining our methods of service delivery will ensure optimal care.

JOINT MOBILIZATION ENHANCES MECHANISMS OF CONDITIONED PAIN MODULATION IN INDIVIDUALS WITH OSTEOARTHRITIS OF THE KNEE

J Orthop Sports Phys Ther 2016;46(3):168–176.

Treatment effects of joint mobilization may occur in part by decreasing excitability of central nociceptive pathways. Impaired conditioned pain modulation (CPM) has been found experimentally in persons with knee and hip OA, indicating impaired inhibition of central nociceptive pathways.

29 individuals with identified impaired CPM were treated with either joint mobilization or manual cutaneous input. Joint mobilization, but not cutaneous input intervention, resulted in a global increase in pressure pain threshold, indicated by diminished hyperalgesic responses to pressure stimulus.

CPM was significantly enhanced following joint mobilization.

Resting pain was also significantly lower following the joint intervention.

Conclusions:

CPM was enhanced following joint mobilization, demonstrated by a global decrease in deep tissue pressure sensitivity. Joint mobilization may act via enhancement of descending pain mechanisms in patients with painful knee osteoarthritis.

Physiotherapists regularly employ these techniques in order to assist with symptom control.