

## Research Update February 2013

### New

Albert et al (2013, European spine journal) found 100 days of **antibiotic treatment had a beneficial effect on low back pain symptoms** in patients with Modic type 1 changes. The improvements were in function, pain and leg symptoms compared with placebo. This effect was more pronounced at 6 months and 12 months at follow up. Should we be assessing all patients with Modic changes for infections?

<http://link.springer.com/article/10.1007%2Fs00586-013-2675-y>

### Cochrane

#### An update of **Spinal Manipulative Therapy for Acute Low Back Pain**

They examined manipulation or mobilisation in patients with low back pain for less than 6 weeks. Primary outcomes were pain, function and perceived recovery. The effects of spinal manipulative therapy were examined in comparison with inert interventions, sham manipulative therapy, other interventions and as an adjunct. They conclude that **spinal manipulative was no more effective in any condition**. However, due to the paucity of studies they suspect these estimates will change in the future.

<http://www.damcursus.nl/handouts/wervelkolom/cursusavond3/Rubinstein.pdf>

### Surgery

Van Buyten et al (2013 Neuromodulation: Technology at the Neural Interface) conducted a multicenter trial examining the effect of **high-frequency** (up to 10kHz) **waveforms** for the treatment of intractable back and limb pain. 83 patients with back pain were recruited and trialled two percutaneous eight contact epidural leads. Pain, disability, sleep disturbances and satisfaction were assessed for up to 6 months. 88% of patients (72 out of 82) reported significant improvement in VAS and had a permanent system implanted. Mean **back and leg VAS was reduced from 8.4 to 2.7, and 5.4 to 1.4 at six-months** respectively. There were **significant improvements all other parameters** as well. Lead migration, wound infection and pain around the implant site were the only adverse events reported.

<http://onlinelibrary.wiley.com/doi/10.1111/ner.12006/abstract>

## Psychology

Wand et al (2014 Clinical Journal of Pain), part of Moseley's group, assessed 24 chronic low back pain patient's ability to localise sensory information delivered to their backs compared with healthy controls. Vision was occluded and light touch or pinpricks were applied to multiple areas. **Chronic low back pain patients mislocalised sensory information compared more frequently compared with healthy controls.**

<http://bodyinmind.org/wp-content/uploads/WAND-et-al-2013-Clin-J-pain-mislocalisation.pdf>

## Manual Therapy

Richards et al (2013 Manual Therapy) conducted a **systematic review on physiotherapy functional restoration (PFR)** for chronic low back pain. 16 studies were included and they concluded that, "Moderate to high quality evidence was found of small effects favouring PFR compared with advice. **Preliminary evidence suggested PFR is not different to other treatment types.** Further high quality research is required replicating existing trial protocols."

<http://www.sciencedirect.com/science/article/pii/S1356689X12001464>

## Exercise

Holger et al (2013, Clinical Journal of Pain) conducted a systematic review on yoga for low back pain. They found "**strong evidence for short-term effectiveness and moderate evidence for long-term effectiveness of yoga for chronic low back pain** in the most important patient-centered outcomes".

[http://journals.lww.com/clinicalpain/Abstract/2013/05000/A\\_Systematic\\_Review\\_and\\_Meta\\_analysis\\_of\\_Yoga\\_for.10.aspx](http://journals.lww.com/clinicalpain/Abstract/2013/05000/A_Systematic_Review_and_Meta_analysis_of_Yoga_for.10.aspx)

## Nutrition and Lifestyle

The excellent title of this paper says it all, "**Obesity Is Associated With Inferior Results After Surgery for Lumbar Spinal Stenosis: A Study of 2633 Patients**

**From the Swedish Spine Register**" 9Knutson et al 2013, Spine). Patients with higher BMI's fared worse after surgery.

[http://journals.lww.com/spinejournal/Abstract/2013/03010/Obesity\\_Is\\_Associated\\_With\\_Inferior\\_Results\\_After.11.aspx](http://journals.lww.com/spinejournal/Abstract/2013/03010/Obesity_Is_Associated_With_Inferior_Results_After.11.aspx)

### **Alternative**

**Acupressure of the low back point on the ear reduced pain 70% and improved function** in a **4-week pilot randomised controlled trial** (Yeh et al 2013, Evidence Based Complimentary and Alternative Medicine).

<http://www.ncbi.nlm.nih.gov/pubmed/23554825>