Dr Ian Wallbridge
Musculoskeletal Specialist
Rotorua

Saturday, June 11, 2016
11:30 - 12:00  Managing Intractable Spinal pain
2 years of pain
2 years of pain
2 years of pain
Intractable spinal pain

KEY POINT #1

2 types:
SOMATIC PAIN
RADICULAR PAIN
Somatic referred pain

- Stimulation of peripheral endings of nociceptive afferent fibers
- From soma (Latin) body typically facet /z joints
Somatic referred pain

- Stimulation of peripheral endings of nociceptive afferent fibers
- From soma (Latin) body typically facet / SI joints
Radicular pain

- **Neurogenic pain**
  - Stimulation or irritation of the nerve roots or dorsal root ganglion of a spinal nerve
  - Typically prolapsed disc
Radicular pain

- **Neurogenic pain**
  - Stimulation or irritation of the nerve roots or dorsal root ganglion of a spinal nerve
  - Typically prolapsed disc
2 years of pain
2 years of pain
2 years of pain
DOES IT HURT WHEN I DO THIS?

PHYSIO
Gimme a break.
"Have you tried turning it off and turning it on again?"
KEY POINT # 2  Radiological imaging

The correlation between abnormal radiological findings and pain is poor

0 milliseconds Before impact
75 milliseconds Ligament injury occurs
150 milliseconds Maximum head extension
300 milliseconds Maximum head flexion
Thoracic zygapophysial joints
Zygoapophyseal joint injury

Figure 17.5 A sketch of the possible lesions of whiplash, as predicted by biomechanics studies.
The correlation between abnormal radiological findings and pain is poor

Cervical zygapophysial joints
KEY POINT #3

Can’t diagnose clinically...
C5,6 medial branch blocks
C5,6 medial branch blocks

C5-6 zygapophysial joint
C5,6 medial branch blocks
KEY POINT #3

Cervical Z-Joint Pain Map

Radiating pain patterns from the neck

C3-4
C2-3
C5-6
C4-5
C6-7
KEY POINT #3

FACET JOINT PAIN ONLY DIAGNOSED BY MBB’S
Randomised controlled trial

24 patients selected on the basis of 100% relief from placebo-controlled medial branch blocks
The criteria for a successful outcome were
• complete relief of pain
• restoration of activities of daily living, and
• no need for continuing health care for neck pain.

RF neurotomy
Sham treatment

Randomised controlled trial

24 patients selected on the basis of 100% relief from placebo-controlled medial branch blocks
The criteria for a successful outcome were
• complete relief of pain
• restoration of activities of daily living, and
• no need for continuing health care for neck pain.

Results, median duration of complete relief:
RF neurotomy – 263 days
Sham treatment – eight days

NZ experience

• James Borowczyk
• John MacVicar
• Christchurch

Key Point # 4

Quebec task force clinical classification of whiplash associated disorders

RF neurotomy is the gold standard for treatment against which all other treatments should be measured
What Is the Source of Chronic Low Back Pain and Does Age Play a Role?

Michael J. DePalma, MD,* Jessica M. Ketchum, PhD,† and Thomas Saullö, MD‡

*Department of Physical Medicine and Rehabilitation, Virginia Commonwealth University/Medical College of Virginia, Richmond, Virginia. †Department of Family Medicine, University of Virginia, Charlottesville, Virginia. ‡Department of Physical Medicine and Rehabilitation, Oregon Health & Science University, Portland, Oregon.

Methods. Patients with recalcitrant low back pain underwent diagnostic procedures based on their clinical presentation until the pain source was identified.
Facet joint pain

- Noxious stimulation of the facet joints in normal volunteers provokes pain in the low back and referred to the lower limb.
- Chronic low back pain can be relieved by anaesthetising the facet joints in a number of patients with chronic low back pain.
Facet joint pain

- In young patients with a history of injury, the prevalence of ZA joints as a cause of low back pain is about 15% (+/- 5%).
- In older patients attending a Rheumatology clinic, and in heterogenous patients attending a pain clinic, the prevalence was about 40%.

Diagnosing facet joint pain **KEY POINTS**

- No clinical features help to distinguish facet joint pain from other causes of low back pain
Diagnosing facet joint pain

KEY POINTS

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- Facet joint pain can not be diagnosed by clinical examination
Diagnosing facet joint pain **KEY POINTS**

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- Facet joint pain cannot be diagnosed by clinical examination
- Facet joint pain cannot be diagnosed by imaging
Diagnosing facet joint pain

KEY POINTS

- No clinical features help to distinguish facet joint pain from other causes of low back pain
- Facet joint pain can not be diagnosed by clinical examination
- Facet joint pain can not be diagnosed by imaging
- The only reliable diagnosis is made using controlled medial branch blocks. Schwarzer et al 1994, Schwarzer et al 1995, Manchikanti et al 1999
declined
NZ experience

• James Borowczyk
• John MacVicar
• Christchurch, New Zealand

Lumbar medial branch radiofrequency Neurotomy in NZ Pain Medicine 2013;14:639-645
Sacroiliac joint pain

- Noxious stimulation of the SI joints in normal volunteers provokes low back pain.

Sacroiliac joint pain

- Studies using controlled diagnostic blocks of this joint showed that the prevalence of pain arising from this joint in patients with chronic low back pain was between 13 and 19%.

Somatic or radicular referred pain?
Radicular pain  TFI

• 2 year outcome 1/3 : 1/3 : 1/3

• Best for small / moderate prolapse

• Radiation small 60 mGy

• EBM massive compared to CT guided
KEY POINTS

• Somatic vs Radicular
KEY POINTS

- Somatic vs Radicular
- History and pain maps ARE useful
KEY POINTS

- Somatic vs Radicular
- History and pain maps ARE useful
- Clinical tests and Radiology NOT useful
KEY POINTS

• Somatic vs Radicular
• History and pain maps ARE useful
• Clinical tests and Radiology NOT useful
• Needles NOT knives for diagnosis and (usually) treatment
Fear/Frustration

Anger/Anxiety

Depression/Dissatisfaction
Fear/Frustration

Anger/Anxiety

Depression/Dissatisfaction

FADE

EXPECTATION