

**PRIMARY HEALTH NETWORK**

**Vertical Integration 2024 - Central Coast**

Wednesday 13<sup>th</sup> March

# Lower Back Pain

Dr Andrew Nealon  
Physiotherapist, PhD

**aspire**  
PHYSIOTHERAPY CENTRE

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## MSK PRESENTATIONS TO GPs

MSK = ~ 14% of all GP consults

“Spine” = 18% of the MSK consults

SO ~ 5% of all consults  
(NB: “other/non-specified” ~ 1/2 of all MSK consults)

~ 20% of people present to a GP each year with a MSK condition.  
Unchanged over this 15-year period.

~30% of MSK consults => referral for imaging

Pollack, A. J., Bayram, C., & Miller, G. C. (2016). Musculoskeletal injury in Australian general practice: 2000 to 2015. *Australian family physician*, 45(7), 462-465.

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## ADULT LOWER BACK PAIN

2<sup>nd</sup> leading cause of disease burden overall in Australia  
Accounts for 4% of total disease burden

1 in 6 (16%) Australians had ‘back problems’ in 2017-18  
= 4 million people

38% of these people (1.5M) reported that pain ‘moderately’  
interfered with ADLs

Australian Institute of Health and Welfare- 30 August 2019

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## ASPIRE CASELOAD

LOWER BACK = 21%

LOWER BACK – BONE = 1.5% = ADOLESCENTS

PELVIS/SIJ = 1%

1-hour initial consult, 30 mins standard consult  
Average 6 consults per presentation = 3.5 hours each patient

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## WHAT PATIENTS WANT

**THEIR 6 QUESTIONS:**

- What have I done? (diagnosis)
- Why is it there? (contributing factors)
- Can you help and what will you do? (physio role)
- What do I need to do? (patient role)
- How long will it take? (prognosis)
- How often do I need to see you? (dosage)

To be heard  
Rapid pain relief  
A plan  
To be listened to AND to be talked to

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## WHAT ADULT PATIENTS HAVE

Non-Specific-Lower-Back-Pain => label/diagnosis matters

**AGE** ↓

- Disc +/-
- Facet Joint/s +/-
- Spondylolisthesis / Foraminal / Canal Stenosis
- Radiculopathy
- Cauda Equina Syndrome (rare)
- Red Flags

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**MOST LOWER BACK PAIN**

Acute Discogenic Pain

Central pain generating structure => uni/bi-lateral pain  
Pain responds to movements and positions  
*Worst* with flexion, sitting, mornings, sudden pressure changes (cough/sneeze/lift/initiating movement)

First Goal = position of relief then helpful movement + manual therapy  
Put them in control of their pain by being in control of their position & knowing where to/not put themselves.



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**DISCOGENIC LOWER BACK PAIN**


The probability of spontaneous regression of lumbar herniated disc: a systematic review

The rate of spontaneous regression was found to be 96% for disc sequestration, 70% for disc extrusion, 41% for disc protrusion, and 13% for disc bulging. The rate of complete resolution of disc herniation was 43% for sequestered discs and 15% for extruded discs.

Conclusions: Spontaneous regression of herniated disc tissue can occur, and can completely resolve after conservative treatment. Patients with disc extrusion and sequestration had a significantly higher possibility of having spontaneous regression than did those with bulging or protruding discs. Disc sequestration had a significantly higher rate of complete regression than did disc extrusion.


So “worse” findings => “better” outcomes

Chiu, C. C., Chuang, T. Y., Chang, K. H., Wu, C. H., Lin, P. W., & Hsu, W. Y. (2015). The probability of spontaneous regression of lumbar herniated disc: a systematic review. *Clinical rehabilitation*, 29(2), 184-195.



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**DISCOGENIC LOWER BACK PAIN**




**Intense LBP**

No calf power  
Intense radicular pain  
Localised paraesthesia  
100% recovered

**Minimal LBP**

No calf power  
Mild radicular discomfort  
Diffuse paraesthesia  
100% recovered




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**MOST LOWER BACK PAIN**

Facet Joint Pain

Can't refer to other side  
More likely unilateral – can be bilateral – not central  
Usually worst into extension

Painful joint needs to be made to move more or unloaded to move less  
Manual therapy necessary and usually helpful  
Sometimes injection required and should work well IF this is confirmed as the pain generator  
Location- thumbs over imaging!



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**MOST LOWER BACK PAIN**

Spondylolisthesis

Usually like flexion & dislike extension  
Usually happy to sit & slouch  
Symptoms & restrictions vary  
Flexion and Strengthening- teach to self-manage: muscle or metal

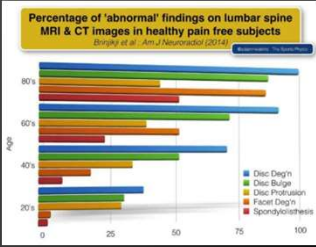
Foraminal / Canal Stenosis

Older  
Most distal often the worst symptoms  
Reduced time on feet, sit for relief  
Flexion movement +/- surgery




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**IMAGING LOWER BACK PAIN**



CT very rarely helpful at all  
MRI costs the same aged 16+ from you or us  
We won't spend patient \$ without good reason  
We have time to translate, explain & demystify


“Severe” medical language in reports is intimidating & deters people from exercise.



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### TALKING TO PATIENTS WITH LBP


Patients will listen to you. They have come for relief and advice.  
 Language is powerful - throwaway lines & cliches can be harmful.  
 Reassurance & recommending movement is advice but it is not treatment.  
 A condition being common doesn't mean it should be tolerated or will just go away on its own.  
 Imaging is usually UNnecessary. Diagnosis and categorising the condition to direct treatment is mostly clinical.  
 Imaging findings being common in asymptomatic people don't render all findings to be irrelevant in patients.



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### TREATING PATIENTS WITH LBP

Manual therapy IS effective AND evidence based – especially early.  
 We are skilled at diagnosis & looking for 'other reasons' patients may not achieve a good outcome. Chronicity is bad for business!  
 Our goal is patient independence.  
 Please refer early and WITH confidence. Patients pick up on this.  
 We know and respect our scope. Our 3 treatment rule.  
 We will always reply with a letter.




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### BUT KID'S LBP IS VERY DIFFERENT!!


Adolescents who experienced LBP > 30 days are 4 times more likely to suffer chronic LBP as an adult.  
**Bone stress/oedema/spondylolysis is most likely diagnosis.**

**62-65%**



They are a fatigue fracture, or a fracture in the making.  
 Risk Factors: male, age, growth, high volume of high impact sporting activity.  
 Spondylolysis is the most common cause of LBP in young athletes.  
 Spondylolysis occurs in up to 44% of professional athletes.


**They do need rest from activity. Healing is slow. Average 18 weeks.**



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### MANAGING KID'S LBP

Please let us see these kids. This is our 'fracture' to manage.  
 These kids should be imaged with MRI when indicated. Clinical tests too insensitive.  
*No radiation. Aged 15 or less, no patient \$ cost.*  
**Bulk Billed- "unexplained back pain where significant pathology is suspected"**  
 MRI outcome + lifestyle determines management.  
**We have seen 150+ at Aspire in 5 years.**  
**82% referred for MRI are confirmed.**  
 The lucky ones are managed completely differently.  
 Early detection is crucial. Recovery is faster. Bony union is optimal.




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Cooper: rugby player, aged 11, seen 10 weeks after insidious onset of bilateral pain, initially in 2<sup>nd</sup> half then earlier in matches. Still playing but worsening. Pain with any impact. Eases stretching into rotation. Aggravated by manipulation.  
 Time to ADL pain resolution: 10 weeks.



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Kirra: 12 years old. Presented with calf pain, no mechanism for calf injury. Able to calf raise, full dorsiflexion ROM, -ve SLR. Lumbar extension testing reproduced the calf pain. MRI shows chronic pars defects that won't heal.  
 Time to ADL pain resolution: 8 weeks.



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**Management of lumbar bone stress injury in cricket fast bowlers and other athletes**

JW Orchard<sup>1</sup>, MD, PhD; R Saw<sup>2</sup>, MBBS, FACSEP; A Kountouris<sup>3</sup>, PhD; D Redrup<sup>4</sup>, MPhys; P Farhart<sup>5</sup>, MEd; K Sims<sup>6</sup>, PhD

<sup>1</sup>School of Public Health, University of Sydney, Australia  
<sup>2</sup>Australian Institute of Sport, ACT, Australia  
<sup>3</sup>LASEM Research Centre, LaTrobe University, Australia  
<sup>4</sup>Cricket NSW, Hornsby, New South Wales, Australia  
<sup>5</sup>School of Sport, Exercise and Rehabilitation, University of Technology, Sydney, New South Wales, Australia  
<sup>6</sup>School of Health and Rehabilitation Sciences, University of Queensland, Australia

Corresponding author: JW Orchard (jw.orchard@sydney.edu.au)

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**Background:** Recent guidelines (including a special series in *The Lancet*) have emphasised a minimal role for imaging when assessing low back pain in adults, as the majority of patients will have non-specific findings on imaging that do not correlate well with pain.

**Objective:** To assess whether the diagnosis of lumbar bone stress injuries in young athletes should be considered an exception to the recommendation to avoid imaging for low back pain in adults.

**Conclusion:** Structural (rather than functional) management of bone stress injuries in high-demand athletes, such as cricket pace bowlers, is in contrast to the recommendation of functional management for general back pain in adults. Structural management is justified when there are demonstrable superior outcomes of having better structure. Although this has not yet been shown in randomised trials of elite athletes, apparent lengthier Test cricket careers of pace bowlers who do not have pars defects suggest better athletic outcomes if bony healing is achieved. For lower demand young adults, or athletes with established bilateral pars defects, functional management may be more pragmatic.



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**SIJ PAIN**

**More complicated to treat.**


More likely to be unilateral than LBP.

SIJ symptoms overlap & contribute to LBP far more commonly than the SIJ is a pain generator. L5 sits on the S! Which sits between the SIJs!

Doesn't "go out". Does move (a tiny bit).

Pain Diagnosis: 3/5 clinical tests (Laslett)


Less likely to self-resolve. Nothing really to heal.

*Pregnancy – belt - prolotherapy* 


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**ADULT LOWER BACK PAIN ≠ KID'S LOWER BACK PAIN**

**KIDS GET BONE PATHOLOGY => IMAGING LIKELY NEEDED**



419 Terrigal Drive  
 Erina  
 P: 02 4380 8277  
 F: 02 4380 8278  
 E: [info@aspire.physio](mailto:info@aspire.physio)  
 W: [aspire.physio](http://aspire.physio)



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**8 Physiotherapists**

**2 Exercise Physiologists**

**A team approach**

PLEASE LET US KNOW IF YOU WOULD LIKE ME TO PRESENT TO YOUR PRACTICE. We can arrange a presentation customised to the subjects you would like to be covered.



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