

Central Coast | March 2023

# GP Club: Musculoskeletal Medicine

Face to Face: Thursday 2 March 2023

**Lower Back Pain  
SIJ & Hip Pain**

**Dr Andrew Nealon  
Physiotherapist, PhD**

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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” ~ ½ 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

(1) 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.

## **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**

(2) Australian Institute of Health and Welfare- 30 August 2019

## ASPIRE CASELOAD

LOWER BACK = 21%

+

LOWER BACK – BONE = 1.5%

PELVIS/SIJ = 1%

HIP = 6%

1 hour initial consult, 30 mins standard consult

Average 6 consults per presentation = 3.5 hours each patient

# WHAT PATIENTS WANT

To be heard

A diagnosis

Pain relief

A plan- education & prevention- to know what & not to do

To be listened to AND to be talked to

(3)



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## WHAT ADULT PATIENTS HAVE

~~Non Specific Lower Back Pain~~

Disc

+/-

Facet Joint/s

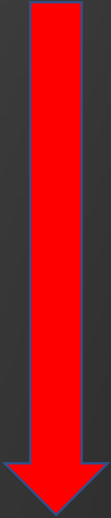
+/-

Spondylolisthesis / Foraminal / Canal Stenosis

Radiculopathy

**Red Flags**

**A  
G  
E**



# 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.

# 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.

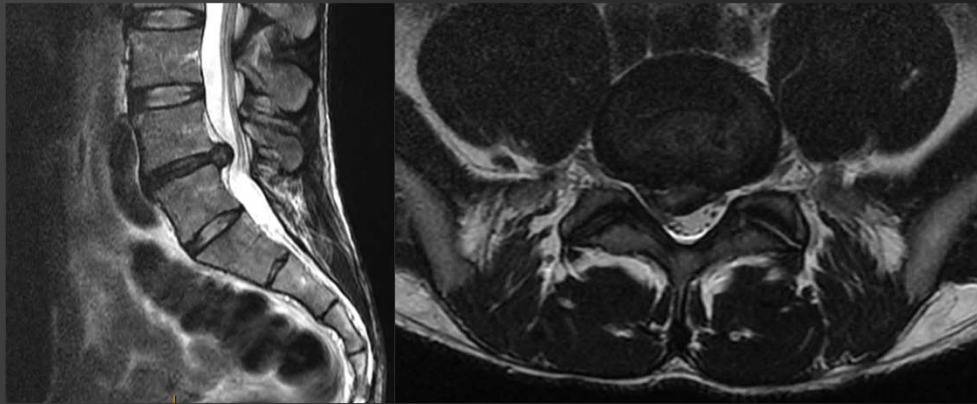
So “worse” findings => “better” outcomes

(4) 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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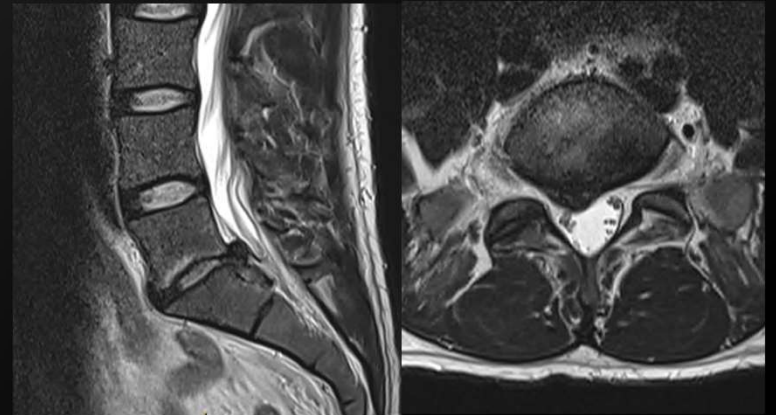


## DISCOGENIC LOWER BACK PAIN



### Intense LBP

No calf power  
Intense radicular pain  
Localised paraesthesia  
100% recovered



### Minimal LBP

No calf power  
Mild radicular discomfort  
Diffuse paraesthesia  
100% recovered

# **MOST LOWER BACK PAIN**

## **Facet Joint Pain**

**Can't refer to other side**

**More likely unilateral**

**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!**

# **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

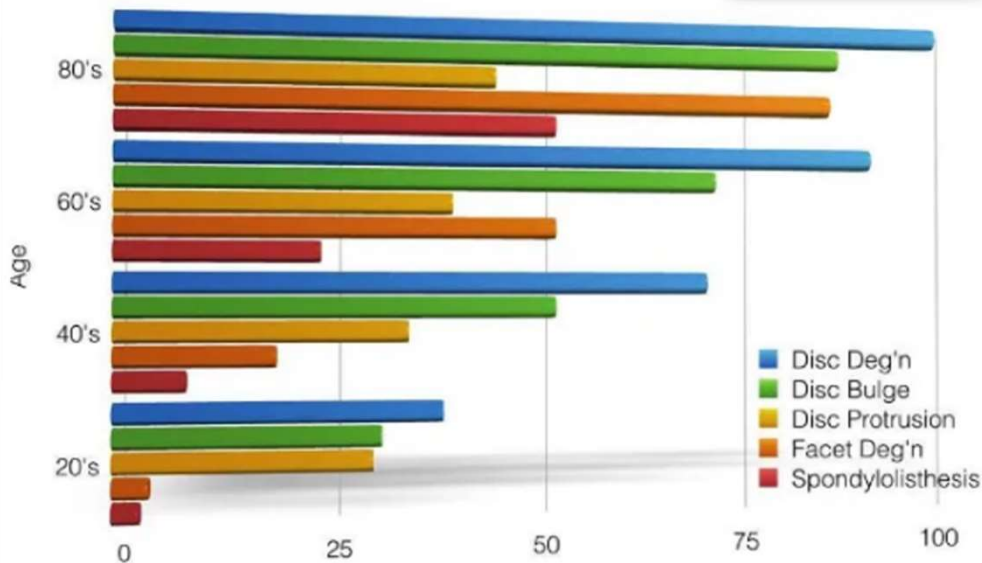
Flexion movement +/- surgery

# IMAGING LOWER BACK PAIN

## Percentage of 'abnormal' findings on lumbar spine MRI & CT images in healthy pain free subjects

Brinjikji et al : Am J Neuroradiol (2014)

@adammeakins The Sports Physio



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

## 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.

A condition being common doesn't mean it should be tolerated or will just go away on its own.

Reassurance & movement is advice but it is not treatment.

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.

## TREATING PATIENTS WITH LBP

Manual therapy is effective – 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.

# 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.**

(6,7)

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.**

## 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.

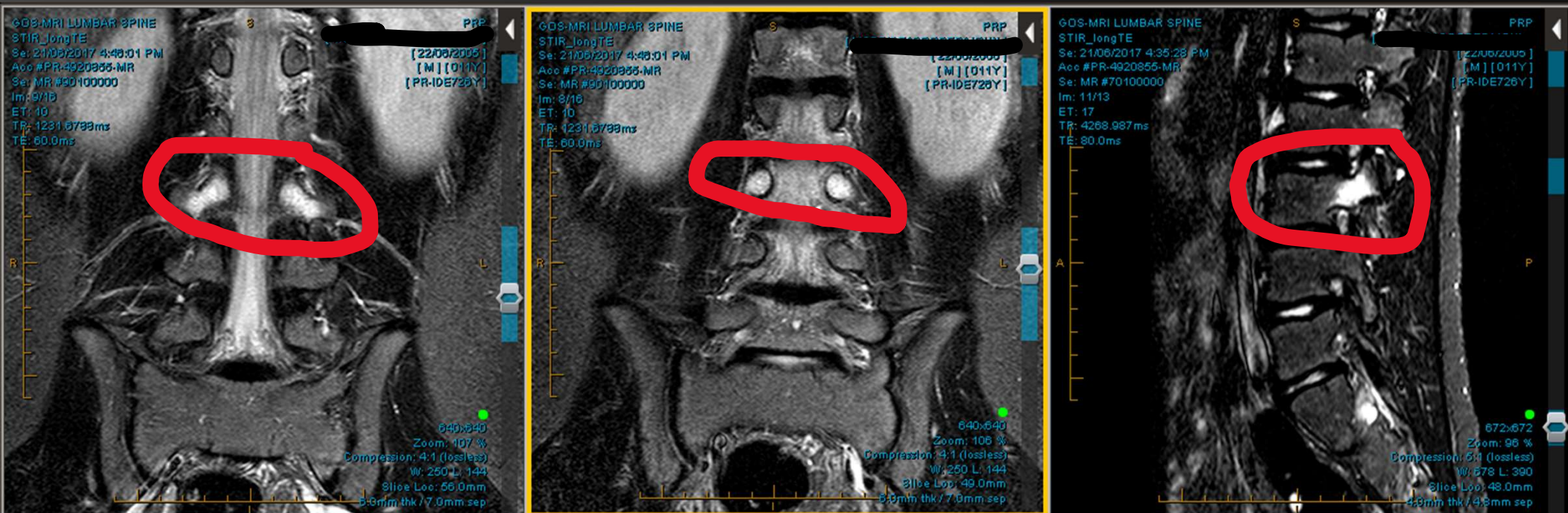
**We have seen 150+ at Aspire in 5 years.**

**82% referred for MRI are confirmed.**

The lucky ones are managed completely differently.

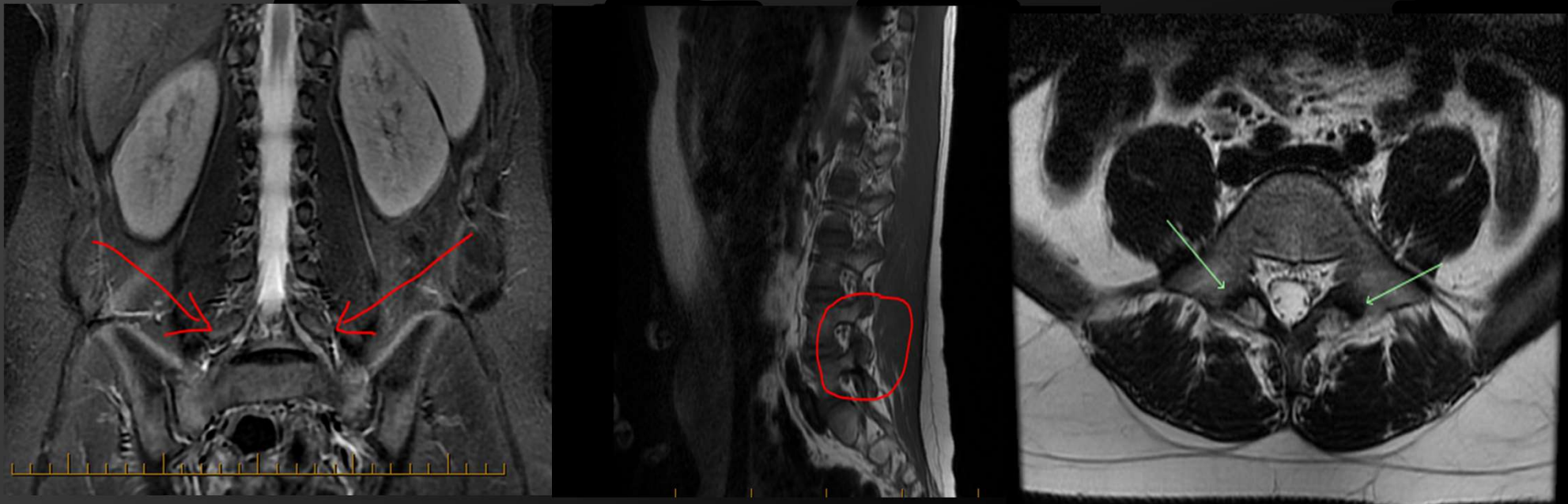
Early detection is crucial. Recovery is faster. Bony union is optimal.





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.



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.

## 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- 8)

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

*Pregnancy*

## ADULT HIP JOINT PAIN

Systematic review - 2,114  
asymptomatic hips  
CAM Deformity = 37%  
Pincer deformity = 67%  
Labral Injury = 68%  
Frank et al. (2015). Arthroscopy

**Impingement and CAM/Pincer**  
“deformity” are just part of the shape of  
the surfaces & OA spectrum.

**Labral “injury”** - like cuff “tears”.  
Treat like meniscus tears – if mechanical  
signs like giving way, catching, locking.

**KEY “NEED”** = hip flexion

**KEY “SIGNS”** = hip flexion & IR@90 ROM

**KEY “TIME IS UP”** = night pain AND daily pain/difficulty

# ADULT LATERAL HIP PAIN

## GLUTEAL TENDINOPATHY

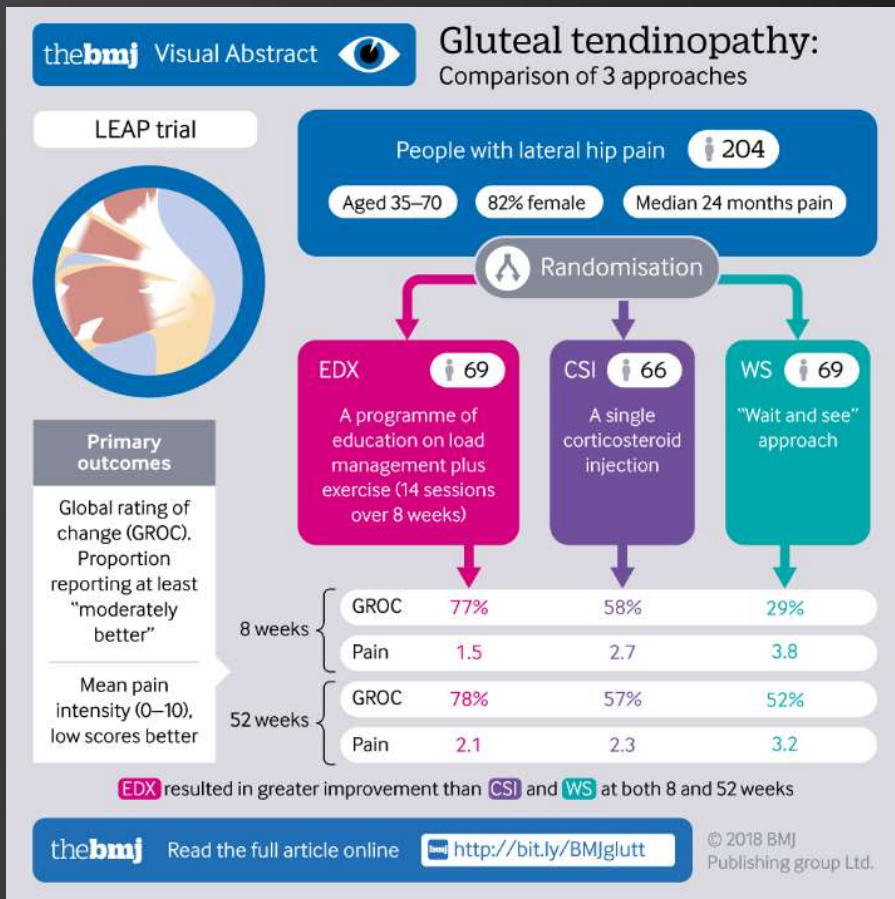
It's not trochanteric bursitis any more!  
 Ultrasound not helpful or necessary  
 Injections rarely helpful or necessary

Exercise program most consistently helpful Rx.  
 Simple things to avoid. Little treatment required.

Usually simple to treat. Grateful patients as most  
 affected time = sleep!

Ladies 50+

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## KID'S HIP PAIN IS DIFFERENT

### Transient Synovitis



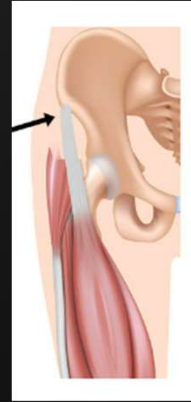
“Irritable hip”

Most common cause of a limp  
in children aged 3-10 (11)

Benign

Often follows viral infection  
May leave behind stiffness

### Rectus Femoris Apophysitis



“Osgood’s of the hip”

Seen in sport kids

Especially kicking leg

Respond well to loading  
programs. Not stretching.

### Pelvis/Hip Avulsion Injuries

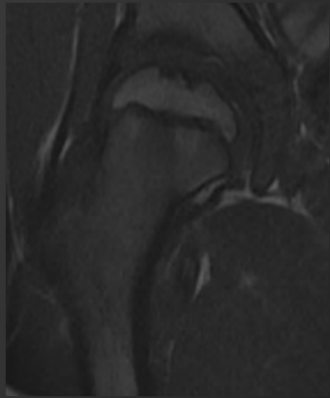
Rectus Femoris – AIIS

Sartorius- ASIS

Biceps Femoris – Ischial Tuberosity

# KID'S HIP PAIN IS DIFFERENT

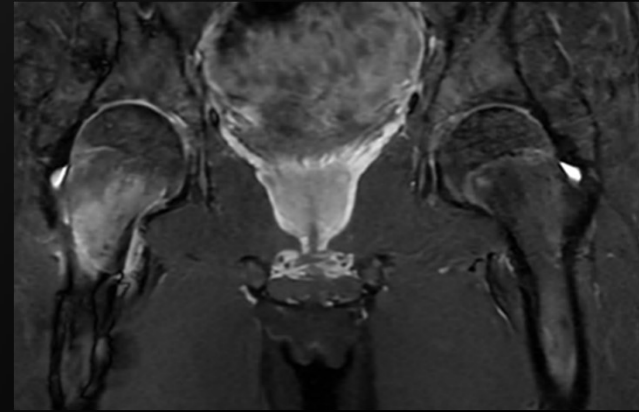
## Perthe's Disease



### Avascular Necrosis of Femoral Capital Epiphysis

We will ask for MRI- bulk billed  
Loss of hip flexion/int rot.  
May have no/referred pain.  
Aged 4-10.  
~No impact activity 12 months

## Femoral Neck Stress Reaction

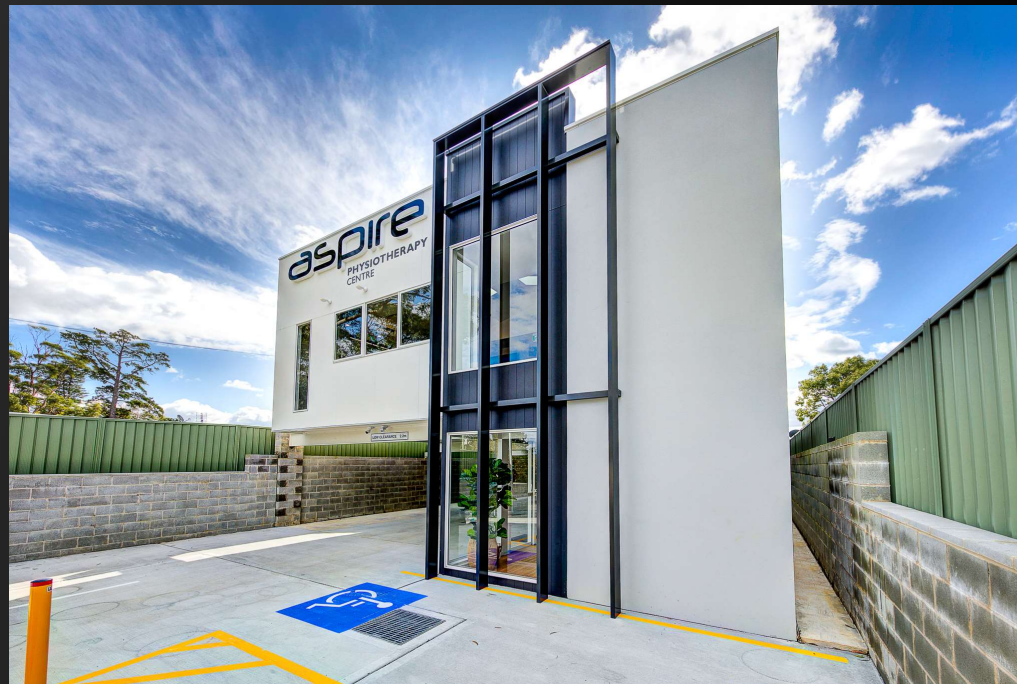


Boy aged 12  
5 months of pain  
Insidious onset  
Waking at night. Can't run  
Posterolateral hip pain

**ADULT LOWER BACK PAIN  $\neq$  KID'S LOWER BACK PAIN**

**ADULT HIP PAIN  $\neq$  KID'S HIP PAIN**

**KIDS GET BONE PATHOLOGY  $\Rightarrow$  IMAGING LIKELY NEEDED**



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(2) Australian Institute of Health and Welfare- 30 August 2019.
- (3) McRae, M., & Hancock, M. J. (2017). Adults attending private physiotherapy practices seek diagnosis, pain relief, improved function, education and prevention: a survey. *Journal of Physiotherapy*, 63(4), 250-256.
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**PLEASE LET US KNOW IF YOU WOULD LIKE ME TO PRESENT  
TO YOUR PRACTICE.**

**We can arrange a presentation customised to the  
musculoskeletal subjects you would like covered.**

**E: [andrew@aspire.physio](mailto:andrew@aspire.physio)**



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**105+ years of clinical experience**  
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**Individualised programs**  
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**Private exercise space**

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## EXERCISE PHYSIOLOGY

In addition to our growing team of physiotherapists, our brand-new centrally located premises at 419 Terrigal Drive Erina now includes a premium equipped, private exercise facility and the expertise of experienced and accredited exercise physiologists available only by appointment.



### We deliver individual exercise programs for:

**BEST BACKS:** Back Pain Recovery

**BEST BALANCE:** Falls Prevention

**BEST BONES:** Osteoporosis

**BEST HEART:** Hypertension

**BEST HEART:** Cardiovascular Disease

**BEST HEALTH:** High Cholesterol

**BEST HEALTH:** Diabetes

**BEST HEALTH:** Mental Health

**BEST HEALTH:** Weight Management

**BEST LIFE:** During & After Breast Cancer

**BEST LIFE:** During & After Cancer Treatment

**BEST LIFE:** Living with Persistent Pain

**BEST NEW JOINTS:** Replacement Recovery

**BEST OLD JOINTS:** Osteoarthritis Optimised

**BEST BODY:** Injury Rehabilitation

**BEST KNEES:** ACL Rehabilitation

**BEST PERFORMANCE:** Play Your Best

**BEST PERFORMANCE:** Youth Athletic Development

**BEST ENERGY** – Fatigue Management

**BEST RECOVERY** – Covid and Long Covid



### We Promise:

Evidence-based practice using a bio-psycho-social model that is customised for the unique needs of the individual, your patient.

Great communication, reporting results & outcomes to you and your patient, objectively demonstrating the effectiveness of our intervention.

Client focused approach, empowering our client with knowledge and tools to build resilience, independence & promoting long term self-management.

### We Deliver:

- Individual 45-minute Initial Consultation: thorough assessment and goal setting.
- Individual Program: based on the latest medical evidence specific to the patient's condition.
- Supervised Exercise: sessions by appointment with an Accredited Exercise Physiologist.
- Exercise Space: brand new, purpose built for patients not powerlifters, private & plenty of parking.
- Ongoing Education & Advice: to guide health and lifestyle choices alongside the patient's exercise plan.



### We Welcome your Patients:

**\* Medicare:** If your patient has a chronic medical condition, they may be eligible for services under a General Practitioner Management Plan (GPMP) and Team Care Arrangement (TCA). Our initial consultation is **only \$30 out of pocket, and remaining sessions on the GPMP will be bulk billed.**

*We are proud to provide our services within our physiotherapy practice in a central location. We welcome you to contact or visit us any time so that we can show you what we do for our patients.*

**We also accept referrals under:**

**Work Cover / Third Party-** requires a current certificate of capacity and referral. We will arrange approval from the insurer.

**Department of Veterans Affairs (DVA)** via D804 referral form to Exercise Physiology.

**NDIS** Self-managed or Plan-managed (not NDIA managed) clients.

**Private** patients to any of our "Best" Programs – **private health fund rebates** now available for Exercise Physiology with most funds.

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## ASPIRE DIABETES GROUP EXERCISE PROGRAM

Diabetes increases the risk of many serious health conditions. Your blood glucose levels and insulin sensitivity can be improved by 2-3 sessions per week of real exercise. This should include both resistance and aerobic activity. It is vital that this exercise is not only safe, but also effective and time well spent. Your quality of life relies on you being at your best, healthy and active.

We have the perfect environment to get you moving again. Our brand new, premium equipped gym space is combined with the expertise of our team to motivate and support you along your journey not only back to your best, but to keep you at your best. Let us show you how.

*People with type 2 diabetes can now receive Medicare rebates for this program provided by our exercise physiologist.*

Eligible patients may undertake this program each calendar year. This group service is in addition to the 5 individual allied health service consultations available to eligible patients with a chronic condition on a GP Management Plan.

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### We deliver

- ✓ 45 minute Individual Initial Assessment
- ✓ Home-Based Individual Exercise Program
- ✓ 8 x once weekly 60 minute Group Exercise Physiology Sessions
- ✓ Reports back to your GP following Initial Assessment and Final Session

**We just need a referral from your GP**

We have experienced exercise physiologists that understand diabetes and know what you need. Our exercise space is within our physiotherapy practice, not a big open plan gym. We provide privacy, expertise, plenty of level parking, all centrally located in our new premises at Erina.

**Out of pocket cost only \$30 for the initial assessment and \$7 per exercise class**



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