

Explain Pain continued...

Week 2

Language used can be harmful.....

“slipped disc”

“I’ve got bad posture”

“wear and tear”

“They won’t operate until it slips further, and I develop weakness”

“crumbling spine”

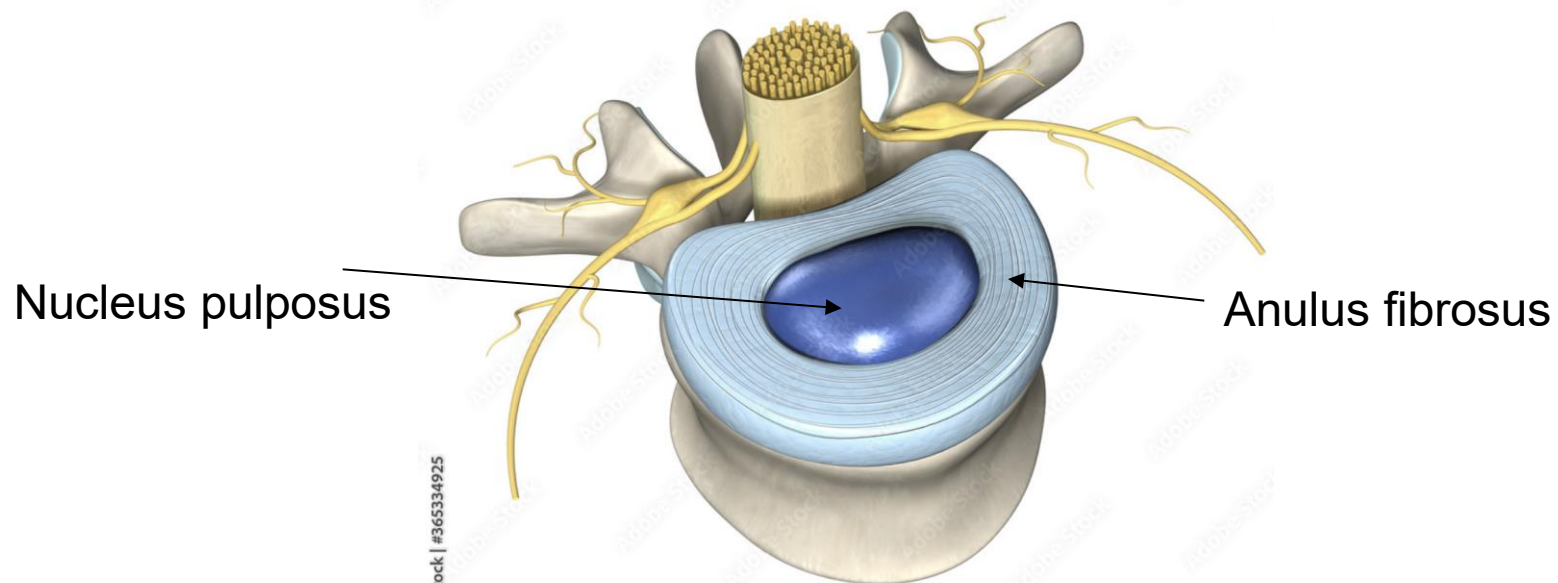
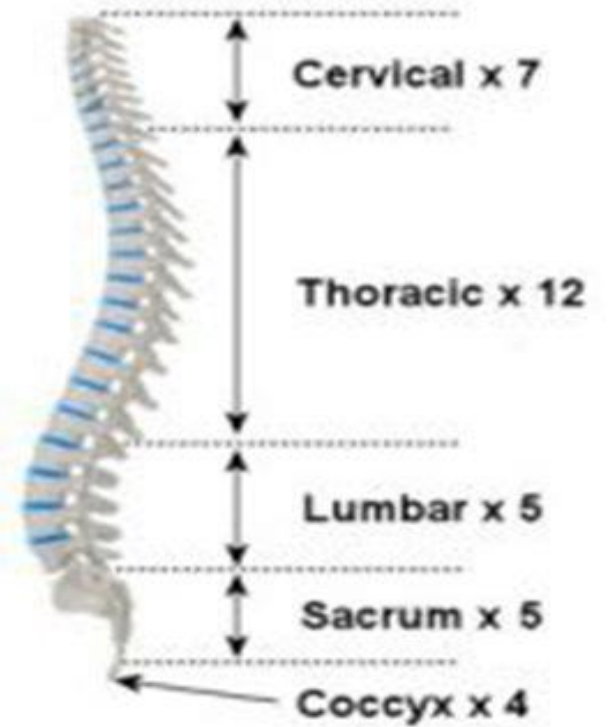
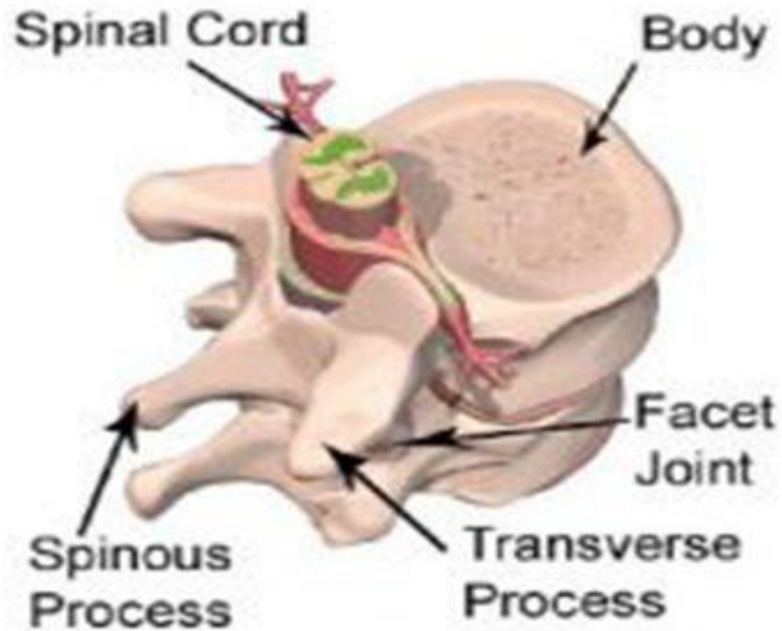
“Surgery has been mentioned before but it’s that bad they won’t go near it”

“I’ve got flat feet”

“it’s bone on bone”

“My spine and pelvis are out of alignment”

“I’ve got a trapped nerve”



Historically, discs were described as jam donuts!

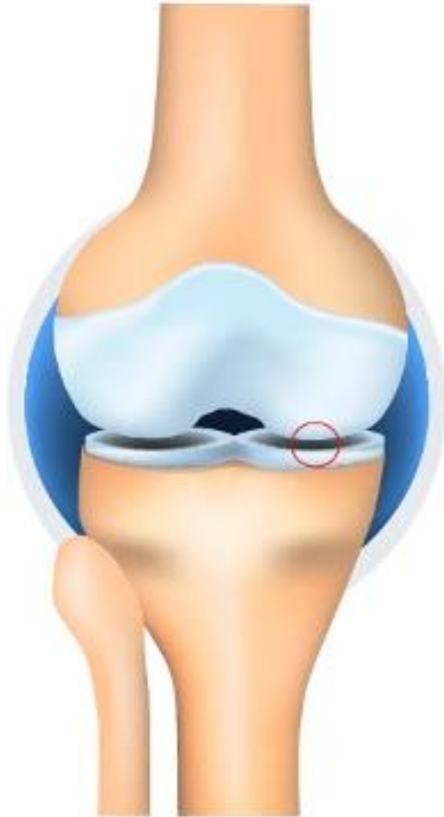
It is much better to think of them as a tractor tyre with thick chewing gum filling the middle.

Discs are robust structures that do not slip. Discs can herniate and protrude, some heal on their own, some remain herniated or protruding, some are present without knowing, some can cause pain to be produced by the brain. Some are herniated and pain-free.

STAGE OF KNEE OSTEOARTHRITIS

I

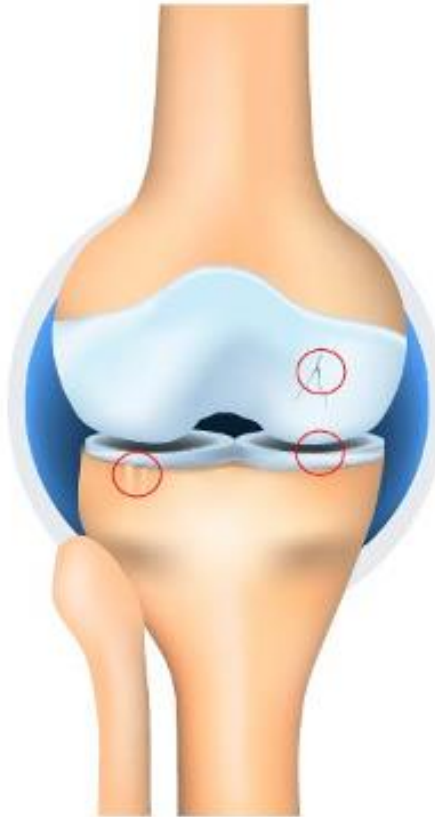
Doubtful



Minimum disruption.
There is already
10% cartilage loss.

II

Mild



Joint-space narrowing.
The cartilage to begin breaking down.
Occurrence of osteophytes.

III

Moderate



Moderate joint-space reduction.
Gaps in the cartilage can
expand until they reach the bone.

IV

Severe



Joint-space greatly reduced.
60% of the cartilage is already lost.
Large osteophytes.

Normal age-related changes, some can present at stage 2 and feel significant pain, others can be stage 4 or 5 and manage well. Surgery only indicated if function and life is significantly impacted. Surgery isn't a "pain" treatment.

Red flags

Progressive symptoms
Altered sensation and or control when going to the toilet
Drop attacks
Bilateral pins and needles / numbness
Recent unexplained weight loss
Dizziness, double vision, flickering vision, nausea
Excruciating pain at night
Previous history of cancer
Night sweats
Systemically unwell



Proceed With Care!

“Just send me for a scan so we know what’s going on”

Unwarranted MRI scans are associated with higher intervention rates and poor patient outcomes.

MRI assess anatomy which can help to plan treatment in serious suspected conditions.

MRI cannot diagnose pain or determine the best treatment for pain.

MRI findings **ALWAYS** need to be considering as part of the whole patient assessment.

To scan or not to scan?

Table 2: Age-specific prevalence estimates of degenerative spine imaging findings in asymptomatic patients^a

Imaging Finding	Age (yr)						
	20	30	40	50	60	70	80
Disk degeneration	37%	52%	68%	80%	88%	93%	96%
Disk signal loss	17%	33%	54%	73%	86%	94%	97%
Disk height loss	24%	34%	45%	56%	67%	76%	84%
Disk bulge	30%	40%	50%	60%	69%	77%	84%
Disk protrusion	29%	31%	33%	36%	38%	40%	43%
Annular fissure	19%	20%	22%	23%	25%	27%	29%
Facet degeneration	4%	9%	18%	32%	50%	69%	83%
Spondylolisthesis	3%	5%	8%	14%	23%	35%	50%

^a Prevalence rates estimated with a generalized linear mixed-effects model for the age-specific prevalence estimate (binomial outcome) clustering on study and adjusting for the midpoint of each reported age interval of the study.

Medication

Often referred to as “Pain Killers”- they don’t cure the pain.

Acute pain can be managed well with strong pain relief as they have good short-term effects.

9/10 people who take strong pain relief for persistent pain have no long-term benefits but will still have side effects.

Some people feel they take the edge off.

Some people feel the effect doesn’t last long enough.

Some people feel they block the pain well.

Everyone is different.

Side effects can include,

Dizziness, sickness, sweating, drowsiness, confusion, constipation, weight gain, dry mouth, increased pain, sleep problems, reduced sex drive/ function, difficulty passing urine, immune system dysfunction, memory difficulties, mood changes, risk of falls and fractures.

Weaning off medication must be carefully considered with your prescriber

Group task- 10 minutes

Can you relate to any of the text within,

‘Origin’

‘Descriptors’

‘Multidimensional pain features’

Can you relate to the elements of the pain cycle?

Origin

- Musculoskeletal
Osteoarthritis, Inflammation, Muscle, ligament strain, normal age related changes

Nociception-noxious stimuli
Somatic- skin, muscle, tissue
Visceral- internal organs
Radicular-nerve root irritation

- Neuropathic
Diabetic neuropathy, MS, Cancer and post chemo/radiotherapy, nerve damage following surgery or injury, nerve compression

- Complex regional pain syndrome
Pain and inflammatory response in a specific area

- Chronic primary
Fibromyalgia, unclear pain origin

- Chronic secondary
Where symptoms of another condition is the underlying cause, then the pain from this condition becomes a problem in itself.

- Acute
Trauma, new pain, post surgical pain

Descriptors

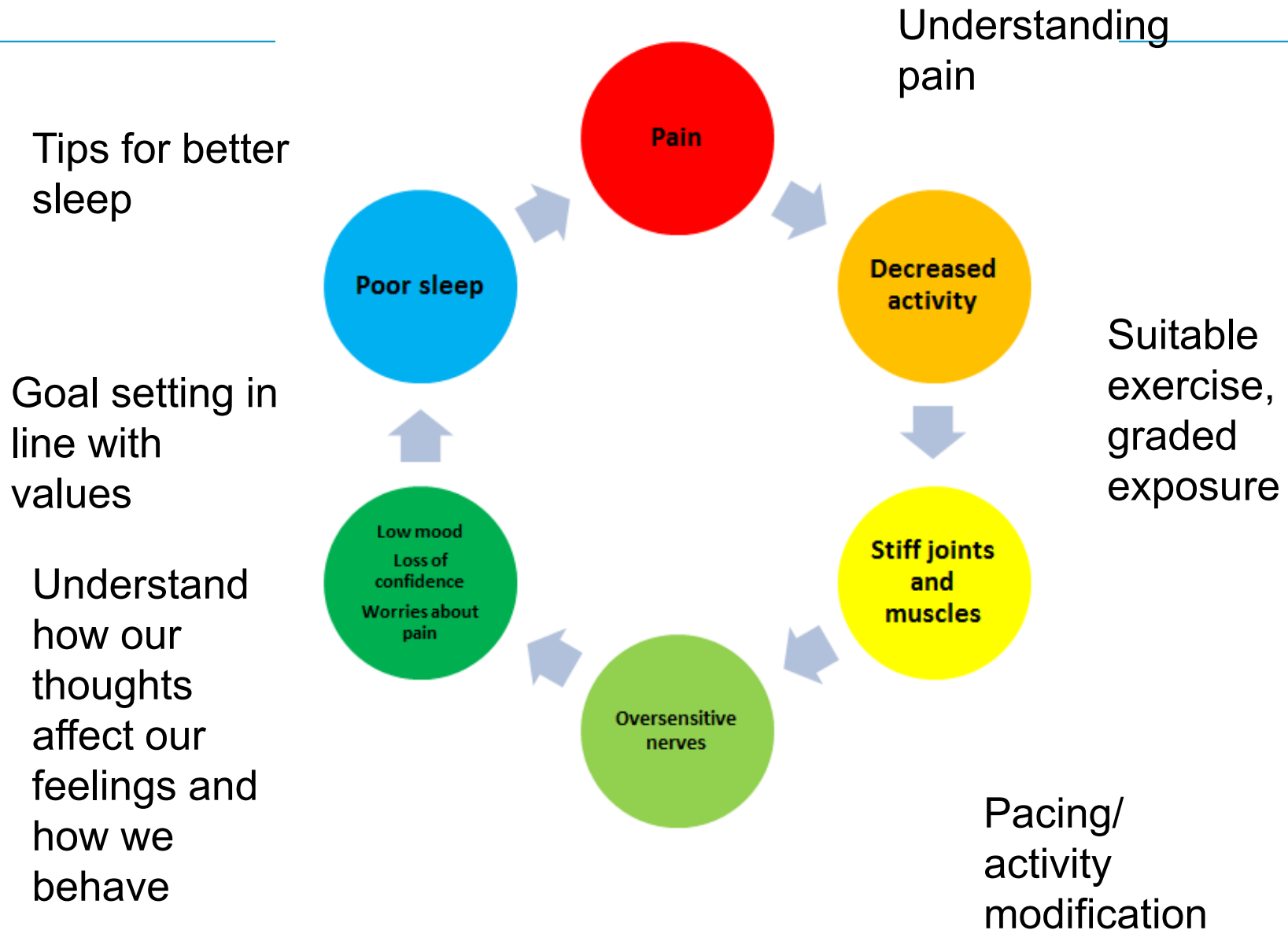
Throbbing
Aching
Sharp
Shooting

Burning
Cramp
Tightening
Crawling
knawing
Tingling
Dull
Stabbing

Multidimensional pain features

Physical
Appetite
Mood
Social
Cognitive
Cultural
Sensory
Behavioural

Pain Management & Lifestyle linked to the Pain cycle



Explain Pain continued...

Week 3

Posture

“I’ve been told that my pelvis is out of alignment”

“I’ve been told that I have poor posture”

Improving posture can help with function and muscle tightness, tension.

“Poor posture” often related to sedentary behaviour- move more, sit less

Fixing it isn’t the answer, consider a whole person approach.

Acupuncture- is it helpful?

Evidence for some short-term relief up to 3/12.

No evidence for long term effects.

Effect varies across individuals.

Stimulates nociceptors and endorphin production.

Some patients like it as they can do it themselves once or twice per week and it works for them.

If effective, it should not be used as a sole pain management tool.

Consider these scenarios from research:

A professional violinist sustains a minor finger injury.



A footballer breaks his leg scoring the winning goal in an important cup game.



Who do you think would experience the most pain and why?

Answer:

The violinist reported high levels of pain with minor tissue damage.

The footballer felt little pain in the presence of major tissue damage.

Remember, pain is not always an accurate indicator of tissue damage

Bio plasticity: Humans can adapt

If we lift weights, we get stronger. If we learn we get smarter.
If we exercise, we get fitter.

If we train our pain system to be more protective, it becomes more protective.

Other systems will also adapt leading to changes in movement, thoughts, emotions, mood, social interactions, behaviours and sleep.

If we gradually exposure our pain system to new activities, thoughts / activities we would typically avoid (protect), we can make our system less protective.

Useful resources

What is Pain? - Live Well With Pain

<https://www.youtube.com/watch?v=DWuGGvyzE6k>

Understanding Pain in less than 5 Minutes

https://youtu.be/C_3phB93rvI

Why things hurt

<https://youtu.be/gwd-wLdIHjs>

Tame the Beast

<https://youtu.be/ikUzvSph7Z4>