

DEFINITION of PAIN

PAIN is

an unpleasant

- sensory
- emotional
- and cognitive

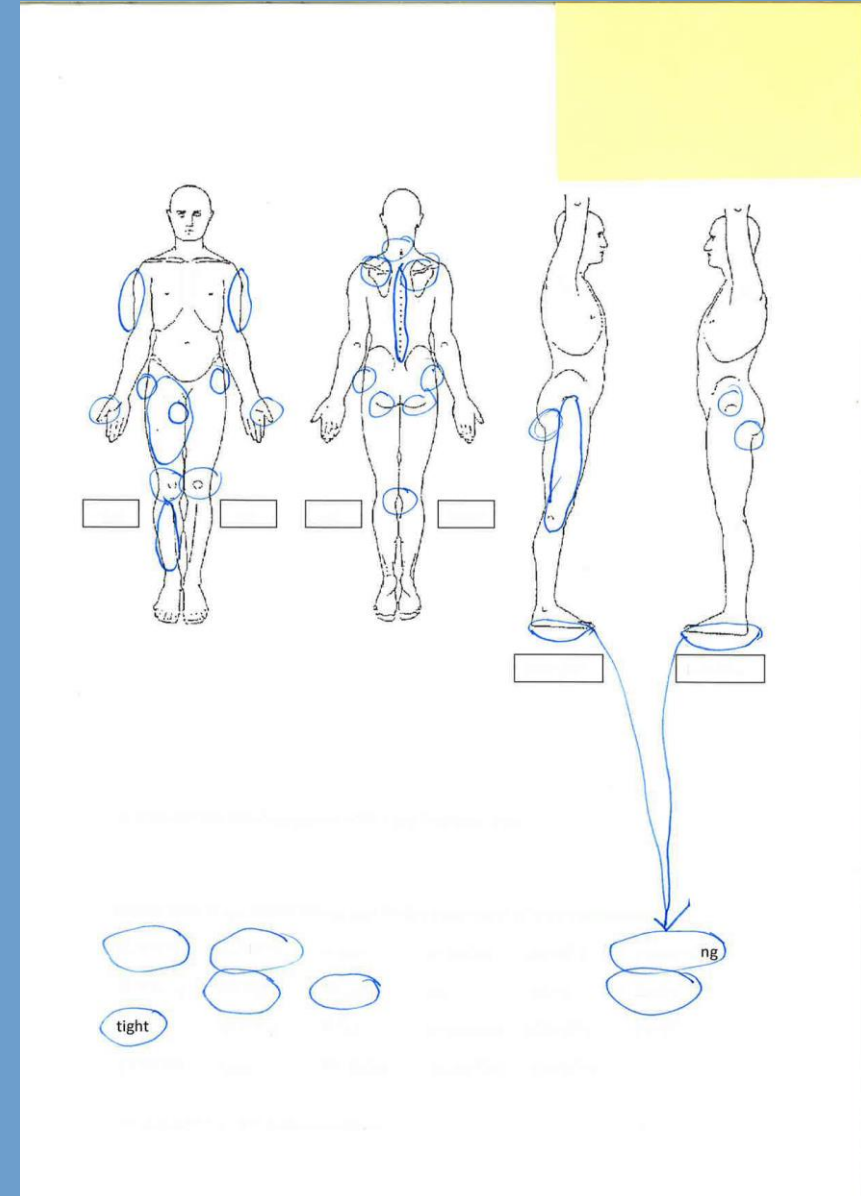
experience

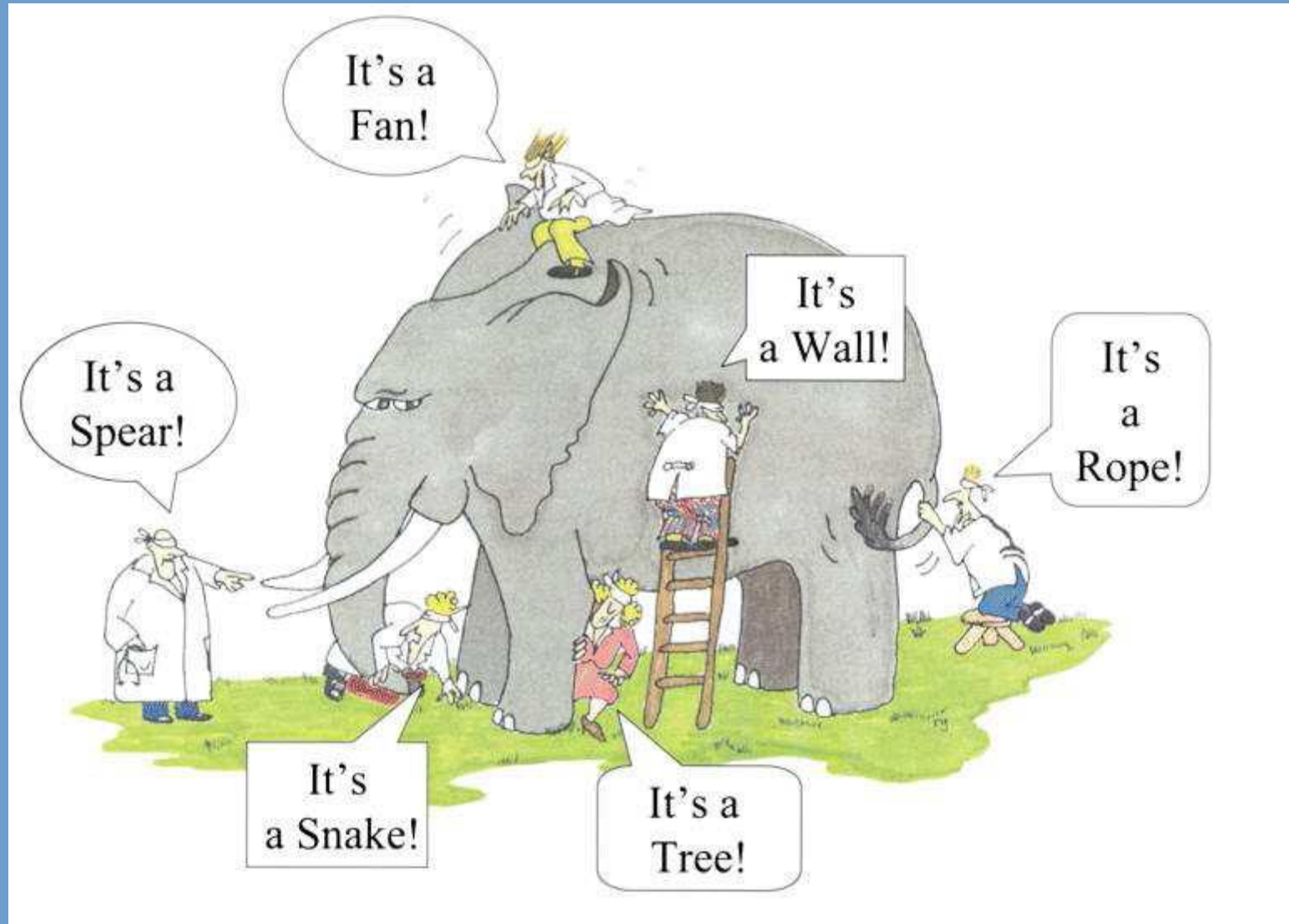
- associated with
- actual or
- potential
tissue damage.

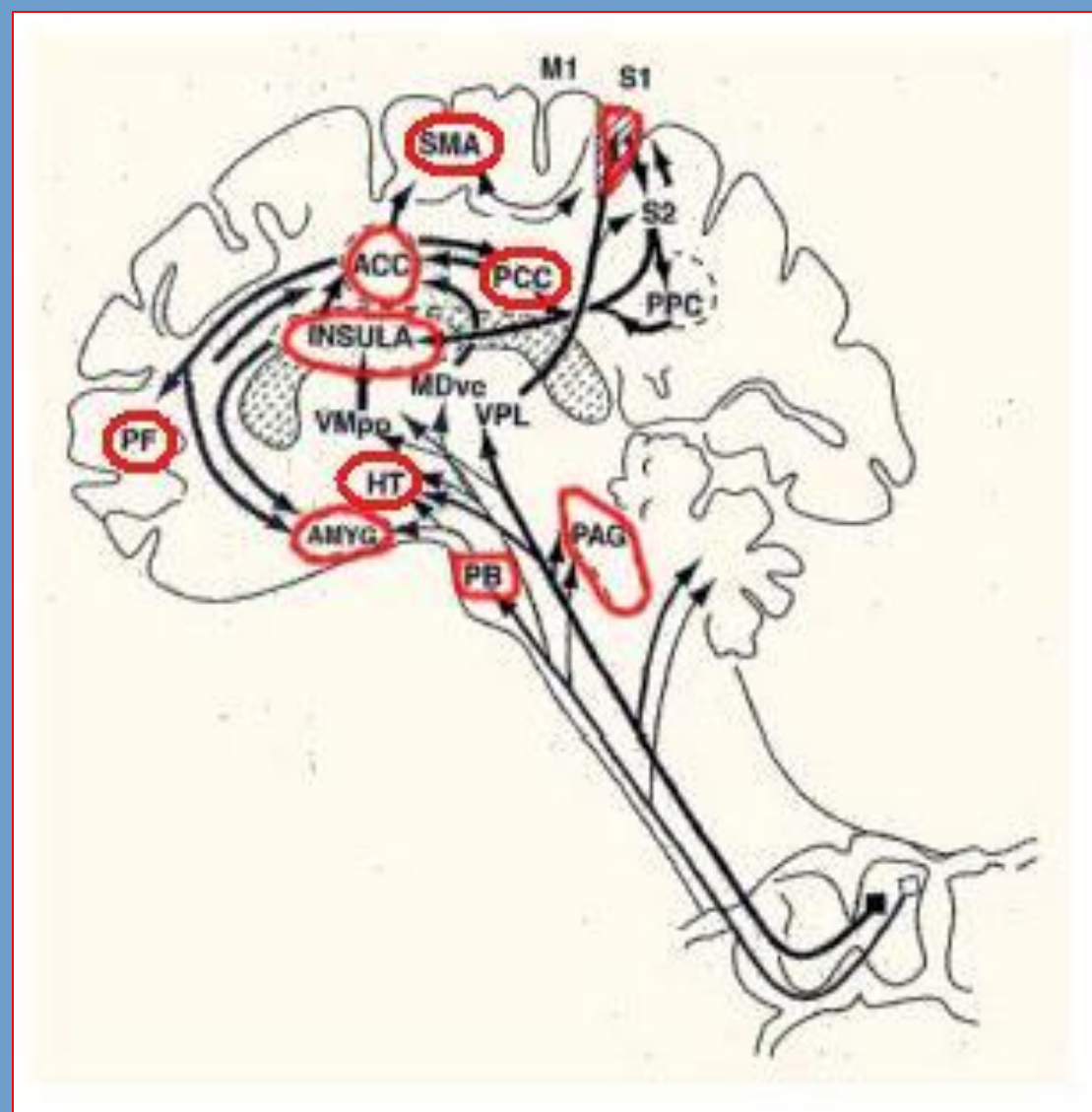
- INTERNATIONAL ASSOCIATION FOR THE STUDY OF PAIN (IASP) 1974
- **PS “it is never a straight line”**

MS, 65yo woman

- Persistent post-TKR pain 2 years (post-surgical neuralgia?)
- Widespread OA, including
- Years of worsening bilateral LBP (ZJ OA possible?)
- Emerged longstanding mood issues with large childhood traumas → psych/mtzp/pregabalin.
- But has lived a productive life.







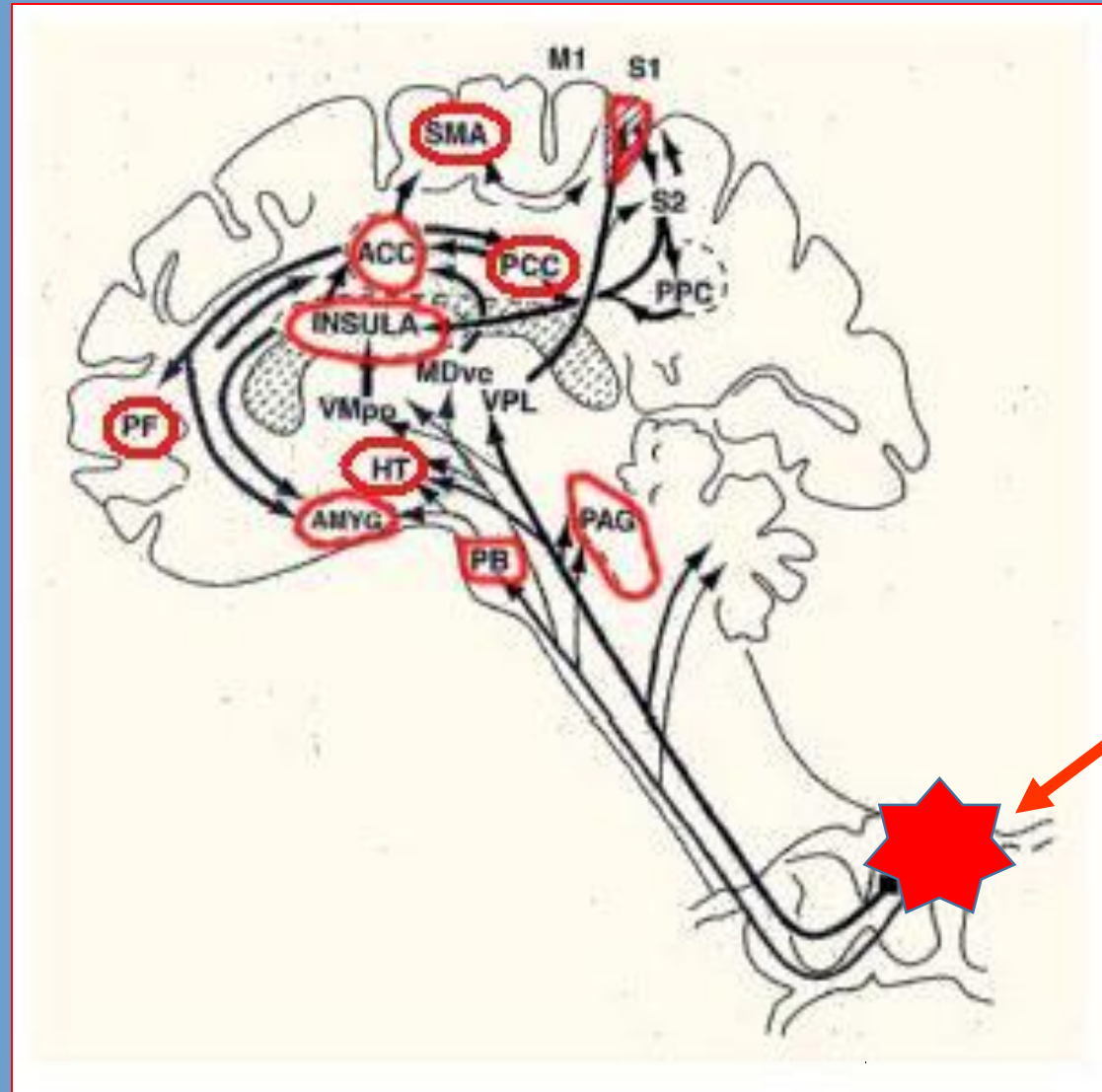
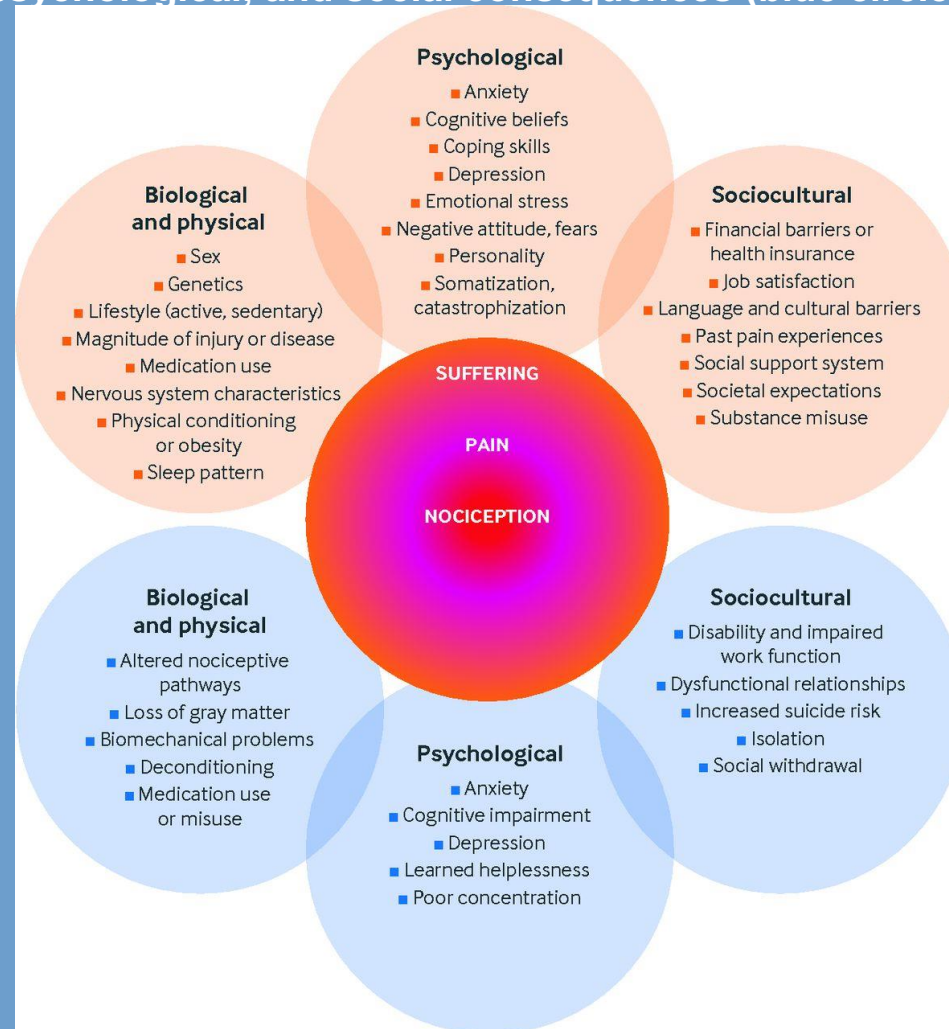


Fig 1 The biopsychosocial model of pain posits that biological, psychological, and social factors influence who develops chronic pain (pink circles) and that chronic pain has biological, psychological, and social consequences (blue circles).



Steven P Cohen, and W Michael Hooten BMJ
2017;358:bmj.j3221



What/where are some of these problems?

Spinal pain (cervical, thoracic, lumbar, sacral) 60%

Headache (migraine, 'tension', chronic daily) 15%

Chronic widespread pain- 'fibromyalgia', 5%
cervicobrachialgia, 'RSI',

Abdominal and pelvic pain syndromes 15%

Facial/dental syndromes 5%

Neuralgias- postsurgical and post-injury, disease-related, toxins eg
drugs 5%

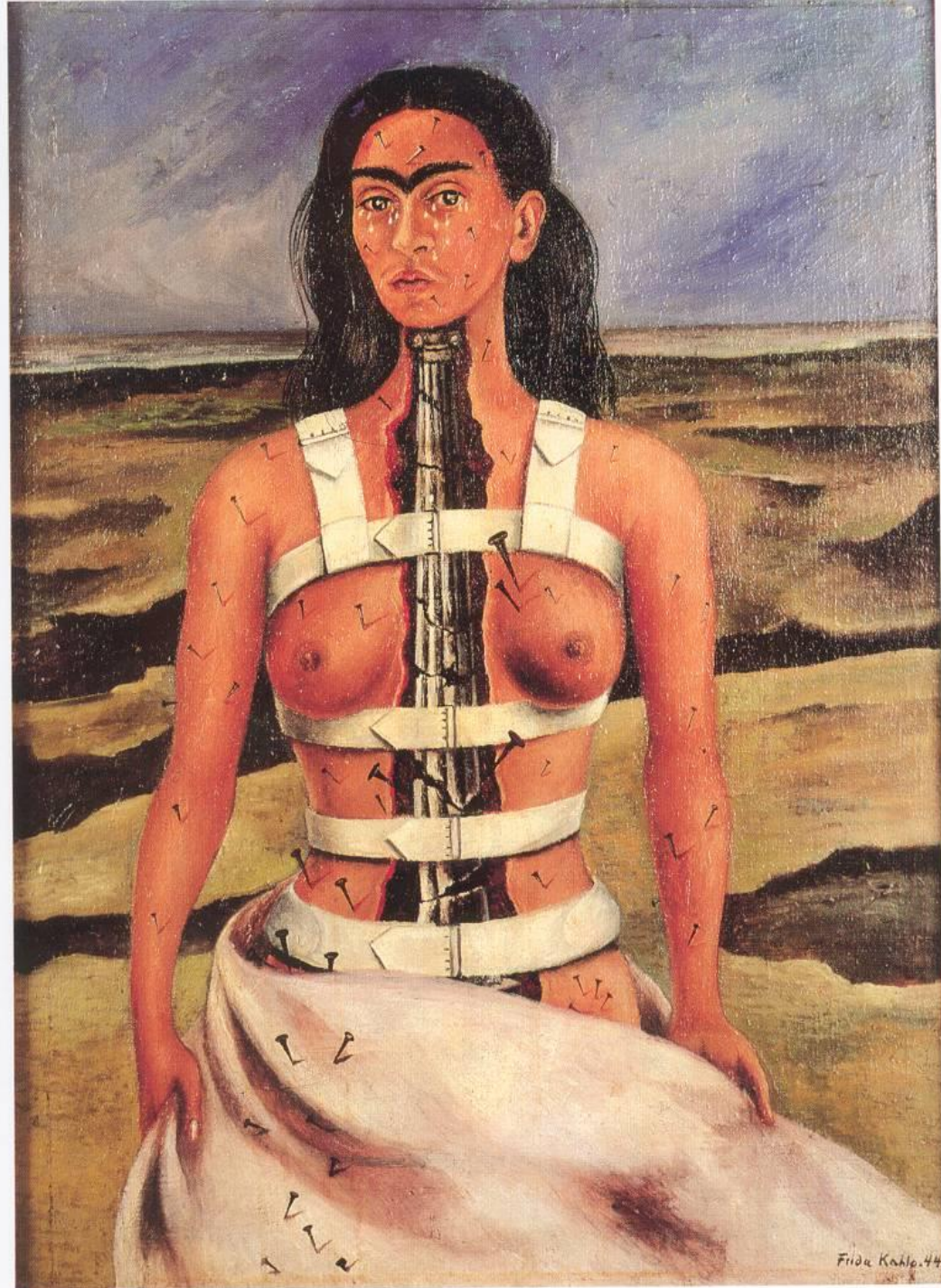
Etc eg joints 10%

	Estimated incidence of chronic pain	Estimated chronic severe (disabling) pain (>5 out of score of 10)	US surgical volumes (1000s)†
Amputation ¹	30–50%	5–10%	159 (lower limb only)
Breast surgery (lumpectomy and mastectomy) ¹	20–30%	5–10%	479
Thoracotomy ^{4–7}	30–40%	10%	Unknown
Inguinal hernia repair ^{8–20}	10%	2–4%	609
Coronary artery bypass surgery ^{11–13}	30–50%	5–10%	598
Caesarean section ¹⁴	10%	4%	220

*Gall bladder surgery not included, since preoperative diagnosis of pain specifically from gall bladder is difficult and persistent postoperative pain could therefore be related to other intra-abdominal disorders. †National Center For Health Statistics, Ambulatory and Inpatients Procedures, USA, 1996.

Table 1: Estimated incidence of chronic postoperative pain and disability after selected surgical procedures*

	Neuropathic pain	Inflammatory pain
Positive symptoms and signs		
Spontaneous pain in damaged area	Yes	Yes
Heat hyperalgesia	Rarely	Often
Cold allodynia	Often	Rarely
Hyperpathia (increased threshold and explosive suprathreshold pains)	Often	Never
Aftersensations	Often	Rarely
Paroxysms	Often	Rarely
Burning pain	Often	Rarely
Throbbing pain	Rarely	Often



PAIN MANAGEMENT PRINCIPLES

“to seek not only a medical diagnosis but also

- emotional
- social
- behavioural
- and occupational
diagnoses”

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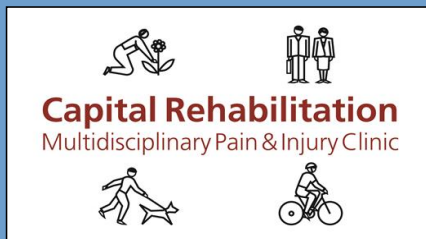
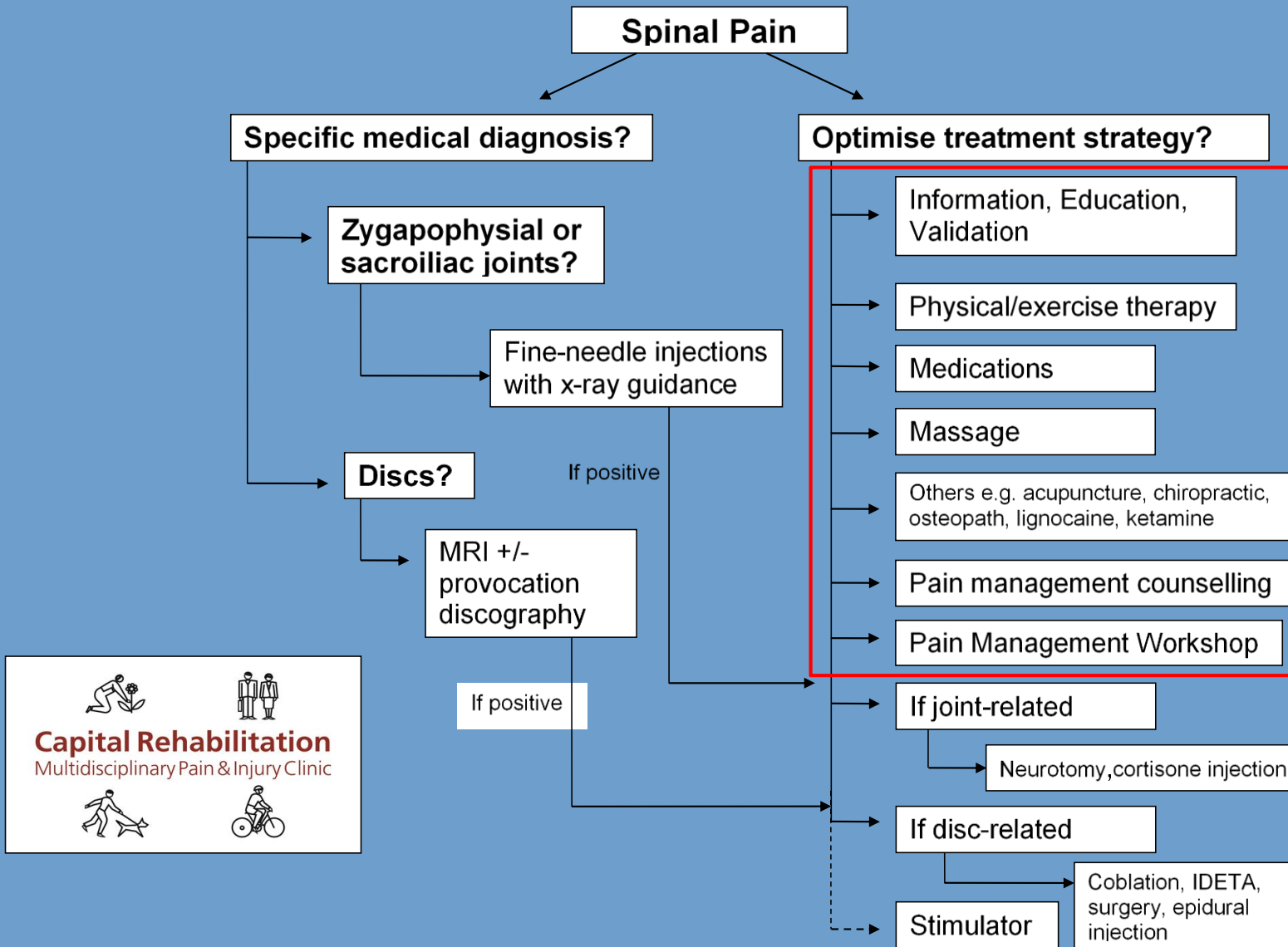
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Remember:

- Validation of the complaint
- ‘Non-specific’ pain=undiagnosed
- Pain is always variable
- Treat the brain processor
- What is the pain
 - Who has the pain
 - With what resources?

MANAGEMENT OF (CHRONIC) PAIN

- MEDICATIONS
 - PHYSICAL THERAPIES
 - PSYCHOLOGICAL STRATEGIES
 - LIFESTYLE and WORK STRATEGIES
-
- Medical PROCEDURES



MANAGEMENT OF (CHRONIC) PAIN

MEDICATIONS (remember NNT and NNH)

‘direct analgesics’:

- simple analgesics –paracetamol
- ‘compound’ analgesics- with or without opioid (usu. codeine)
- anti-inflammatory
- Pure opioids (immediate and Slow-release).
TAPENTADOL

NNT:

- 2-20
- 2-20
- 5
- 5+

‘adjuvant’ analgesics, ‘pain modulating’:

- Antidepressants- noradrenergic DULOXETINE
- Anti-epileptics- carbamazepine, gabapentinoids, valproate
- Topical- eg capsaicin, anti-inflammatory, compounded multiples
- Cannabis

- 5
- 2.6-7
- 8-10
- 25

		Name	Condition	NNT	NNH	Comments	
Interventions		Epidural	Low-back pain	7.0 – 14	6	3mths-12mths	
		Facet joint injection	Neuropathic pain	13			
		Spinal cord stim	Ischaemic leg pain	7			
		Spinal cord stim	Low-back pain	3.2	2.2		
		RF neurotomy	Low-back pain	4.4			
		Root sleeve injection	Radiating leg pain	2.7			
Medications		Panadol	Arthitic pain	4.5	12		
		Neurontin	Neuropathic pain	4.3	2.5		
		Lyrica	Neuropathic pain	5			
		Tramadol	Neuropathic pain	3.8	8.3		
		Endep	Neuropathic pain	3.6	6.0-28	major-minor	
		Efexor	Neuropathic pain	3.1			
		Duloxetine	Fibromyalgia	6.8	9.6-16.2	major-minor	
		Opioids	Neuropathic pain	2.7	4.2		
Behavioural		CBT	Chronic headache pain	2.3			
		CBT	Abdominal pain	2.3			
		CBT	Fatigue	3			
		CBT	Inflammation (IBS)	2.1-3.0			
		CBT	Mood	2			

MANAGEMENT OF (CHRONIC) PAIN

psychological strategies will address:

- Education about Pain
- Fear-Avoidance Behaviour
- Catastrophising (rumination, magnification and helplessness)
- 'Pacing'
- Coping Styles
- Depression and Anxiety
- Trauma
- Pre-Onset psych factors

MANAGEMENT OF (CHRONIC) PAIN

Physical strategies will address:

- Education about functioning despite persisting Pain
- activity modification by behavioural principles
- Physical functional goals, despite persisting pain
- Pre-Onset physical factors
- Some limited hands-on
- Therapeutic massage/touch

MANAGEMENT OF (CHRONIC) PAIN

PROCEDURES Diagnostic and Therapeutic

- Trigger point injections
- Joint injections-peripheral and spinal
- Nerve injections =(peripheral, spinal, epidural, plexus)
- Neurotomy- damaging a nerve by thermocoagulation
- Disc procedures
- Stimulator procedures
- Surgery

NNT- varies with time-frame and degree

3

?

TFE = 3

1.2-2

?

1.5(?cant do control group)

3-10(ditto)

MS, 65yo woman

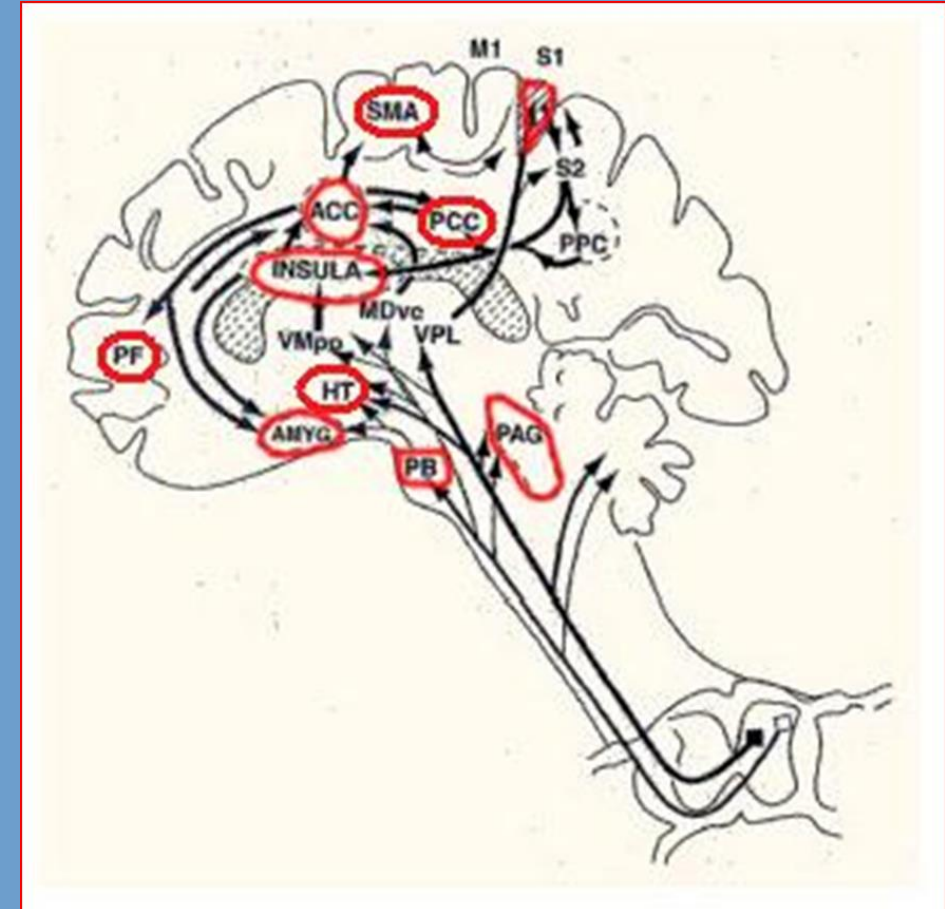
- Good responses to L5/S1 zygapophysial joint injections
- Good response to knee nerve (infra-patellar branch saphenous nerve) injections
- Maybe small fibre neuropathy to explain her burning feet
- → has reasons for her pain, and understands her treatment strategies.
- Her pain continues but she has a realistic plan and is committed.

neuroplasticity

- The physiological function of the brain and spine is not fixed in its current state in any individual
- We are modifiable according to 'inputs'

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Issues to consider:

- Low levels of physical activity in our communities
- Pain resources- appropriateness, availability, affordability, and accessibility
- Pain resources- time and cost commitment by a motivated patient
- Pain levels are always variable in intensity and spread → any continuous use of analgesics means dependency,

Issues to consider:

- The INTERDISCIPLINARY approach is valuable:
- Recognise the effects of a range of combined and co-ordinated options to assist a person deal with their range of issues
- Assist setting the stage for 'readiness to change'

SELF-MANAGEMENT

- Self-management is founded on a patient's capacity to participate and this is likely to depend on a wide variety of patients' specific issues including:
 - ability to identify and understand health messages
 - access to information and services
 - skills to decide what is useful information.
- Understanding these will optimize a patient's capacity to seek, understand and utilize health information to participate in decisions about their health.
- Although patients accumulate extensive lay knowledge and experience in coping and managing their chronic condition on a daily basis, this does not necessarily mean they become aware or have the ability to access and use health information resources effectively to enhance self-management.
- Facilitate or augment current evidence-based practice
- Self-management educational activities are directed at behavioural change.

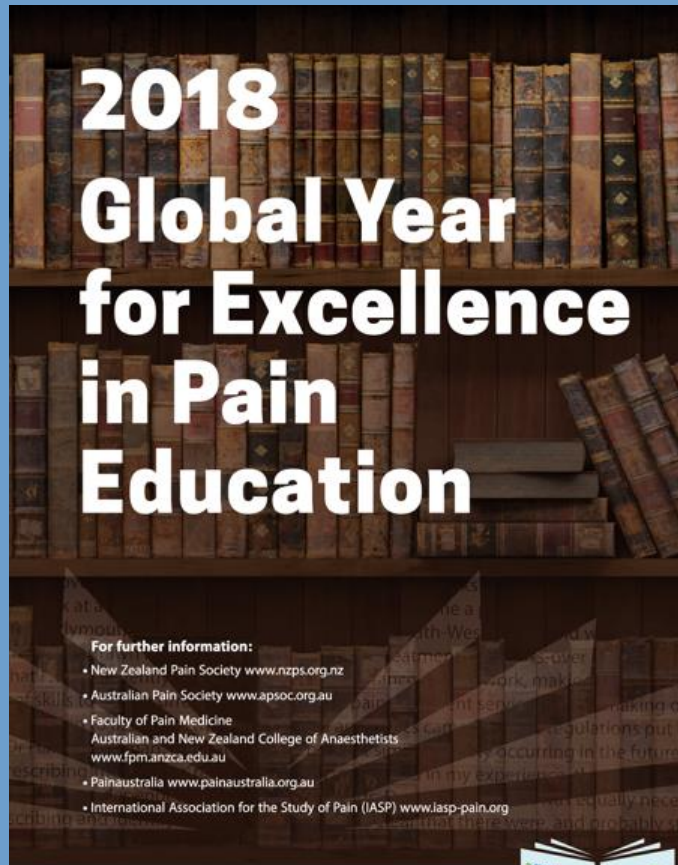
Management options for (chronic non-cancer) pain

- Non-opioid options exist with evidence of equal and better efficacy
- Non-medical Pain management options are time-consuming, but show efficacy no worse than many medical treatments.
- Calibrating patient expectations to what they can do despite persisting pain, and that improvements from pain management is measured in not-large percentages is important.
- This is, after all, all that can be achieved with baggage-laden opioids which carry many risks.



THE
AUSTRALIAN
PAIN SOCIETY

***Vision:** All people will have optimal access to pain prevention and management throughout their life.*



For further information:

- New Zealand Pain Society www.nzps.org.nz
- Australian Pain Society www.apsoc.org.au
- Faculty of Pain Medicine
Australian and New Zealand College of Anaesthetists
www.fpm.anzca.edu.au
- Painaustralia www.painaustralia.org.au
- International Association for the Study of Pain (IASP) www.iasp-pain.org



Local and IASP Global Year Resources:

<https://www.apsoc.org.au/global-year-against-pain>

