INFORMING STUDENT SELECTION OF OUTCOME MEASURES FOR EVALUATING PAIN IN THE BIOPSYCHOSOCIAL PRIVATE PRACTICE CONTEXT

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IFOMPT Standards Committee
How do your students assess and interpret the meaning of a specific patient's pain presentation?
Where/How is the student’s pain assessment mapped into the IFOMPT Standards Document?

- Evidence Based incorporating
  - Pain Science Theory
  - Measurement Methods
  - Includes the entire patient i.e. their complete biopsychosocial entity

How is this demonstrated to the External Assessor?
PATIENT PAIN PRESENTATION
What subjective data is required to differentiate pain mechanisms involved in the patient presentation?
<table>
<thead>
<tr>
<th>Classification</th>
<th>Mechanism</th>
<th>Nociceptive pain</th>
<th>Peripheral neuropathic pain</th>
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<tbody>
<tr>
<td></td>
<td>“CSP is an amplification of neural signalling within the central nervous system (CNS) that elicits pain hypersensitivity” (Smart, Blake, Staines, Thacker, &amp; Doody, 2012a, p. 336).</td>
<td>‘NP is referred to as pain attributable to those pathophysiological processes associated with activation of the peripheral receptive terminals of primary afferent neurones (Aβ and C fibres) in response to noxious chemical (inflammatory), mechanical or thermal stimuli” (Smart, Blake, Staines, Thacker, &amp; Doody, 2012c, p. 352).</td>
<td>“PNP refers to pain attributable to a lesion or dysfunction in a peripheral nerve, dorsal root ganglion or dorsal root arising from trauma, compression, inflammation or ischemia” (Smart, Blake, Staines, Thacker, &amp; Doody, 2012b, p. 345).</td>
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<tr>
<td>Characteristics and symptoms</td>
<td>Disproportionate.</td>
<td>Pain localised to the area of injury/dysfunction (with/without some somatic referral). Clear, proportionate mechanical/anatomical nature to aggravating and easing factors. Usually intermittent and sharp with movement/mechanical provocation; may be a more constant dull ache or throb at rest. The absence of pain in association with other dysesthesias, night pain/disturbed sleep, antalgic postures/movement patterns and pain variously described as burning, shooting, sharp or electric-shock-like.</td>
<td>Pain referred in a dermatomal or cutaneous distribution. History of nerve injury, pathology or mechanical compromise. Radicular referred pain is often described as distinct, lancinating quality, which travels the length of the limb and is no more than 2-3 cm wide.</td>
</tr>
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**Radicular referred pain** is pain evoked by ectopic discharges emanating from a dorsal root or its ganglion of the spinal nerve (Bogduk, 2006).
What data is required to differentiate pain mechanisms involved in **THE** patient presentation

1. What **SUBJECTIVE** assessment tool(s) do students use to differentiate patient’s pain & inform the rest of assessment / treatment?
2. How does the student receive knowledge regarding these assessment tools?
3. How does the programme **evaluate** the usage of these tools?
What... physical examination data do your students collect to inform their understanding of THE patient’s pain?
Quantitative Sensory Testing
TSA II Neurosensory Analyser
(Medoc, Advanced Medical Systems)

Temperature at which patient first feels a painful heat/cold pain threshold

Differential development of sensory hypersensitivity and central hyperexcitability

Central hyperexcitability results in widespread cold hypersensitivity

Predictive of poor outcome – Kasch et al., 2005; Wallin et al., 2008; Sterling et al., 2005

Occurs only in those with persistent moderate/severe symptoms – PCs?
Clinical Correlate

Ice Water Immersion
Mod/Severe NDI< 40secs
Kaesch et al, 2005
10 sec application of Ice
(VAS>5/10)
Maxwell, 2012

Slide permission: Ashley Smith
More Quantitative Sensory Testing
Electronic Pressure Algometer
(Somedic AB)

Prospective Clinical Data
Sterling et al., 2003

Local – over site of injury/pain
Peripheral Sensitization

Remote – away from site of injury/pain
CNS changes
Clinical Correlate - Algometric measurement:

Pressure pain thresholds (PPT): Lacourt TE et al, 2010
Fischer A 1987

“Cheap” algometer fpk 20 $175-250.00 usd www.paintest.com
Challenges associated with making & teaching clinical correlations from the data:

...
MEANINGFUL PATTERNS
Quantify and justify the **clinical reasoning**!

- What evidence is there that this **patient** will have a suitable outcome?
  - What evidence is there that this **student** will have a suitable outcome?
    - What evidence is there that the **EA** will be able to include in their report?
THANK YOU

COLLABORATIVE BRAIN STORMING ...