

# Individuality .... How knowledge of body perception disturbance can inform treatment

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## Body perception disturbances in CRPS Thoughts about the painful limb

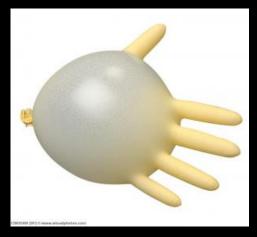


Galer et al. 1995; Galer and and Jensen 1999; Lewis et al. 2007;2010.

### Body perception disturbances in CRPS Altered perceptions



#### ....in limb size and shape



..... weight, pressure



#### & temperature







Lewis JS et al. 2007

### Why is body perception disturbance important?

54.4% - 84% of those with CRPS report disturbances in body perception <sup>1,2</sup>

- Subtle symptoms, often only become apparent via direct questioning and assessment
- Those that present with BPD often having difficulty in engaging with limb affecting rehabilitation outcomes
- Suggestive of an impact on function<sup>3</sup>

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1 Forderreuther S, et al. Pain 2004;110:756-761.
2 Galer BS & Jensen M. J Pain Sympt. Manag 1999;18:213-217
3 Lewis JS et al. Pain 2010;149:463-469
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#### Sensory discrimination training- (Desensitisation)

- Magnitude of body perception disturbance is associated with worsening tactile acuity and poor stimulus localisation (Förderreuther 2004, Lewis & Schweinhardt 2012)
- Somatosensory blurring (Haggard 2013)

- Tactile stimulation **Sharpens** cortical representation of the painful body in S1 (Flor et al. 2001)
- Somatosensory sharpening (Haggard 2013)

• Effectiveness of training is enhanced by viewing the limb (Moseley & Wiech 2009, Lewis et al 2010)