'Complex Regional Pain Syndrome (CRPS) in Clinical Negligence Cases

Causation and Prognosis - Evidence-Based Discussion of Case Examples'

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My background:

- ✧ (Anaesthesia)/Pain Medicine Training in Wuerzburg/Germany, Oxford, UCL, Harvard Medical School (Immunology)
- ✧ Consultant in Pain Medicine (50%) at Walton Centre, Senior Lecturer (Assistant Professor) in Pain Medicine (50%) at University of Liverpool
- ✧ Chair UK CRPS Guidance Group of the Royal College of Physicians
- ✧ Started doing ML reports 2009; about 30 reports/year – mostly high value cases involving Pain Medicine, CL/Def – 3/1
- ✧ Medicolegal contribution: presentations, articles mostly on CRPS, including new understandings on causation.

Pain demands attention. It is ‘hard-wired’ to our consciousness

Chris Eccklestone and Geert Grombez, 1999

‘Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage’

International Association for the Study of Pain

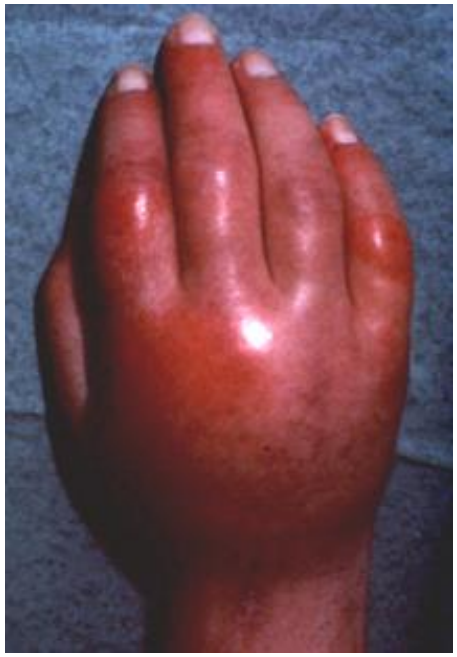
How do we measure pain intensity?

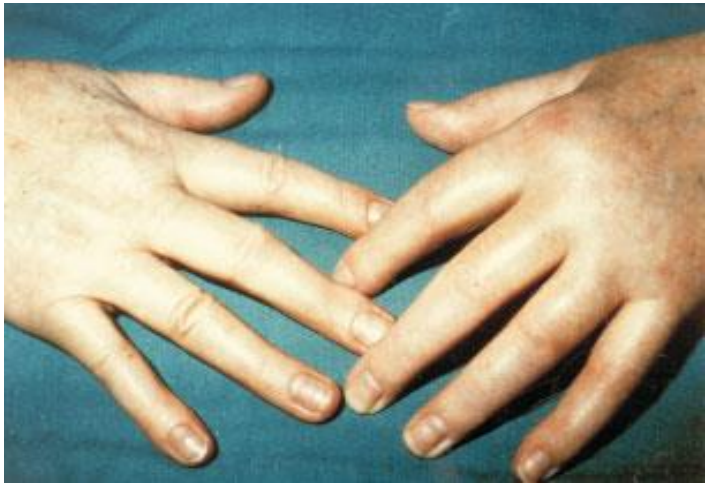
Ideally by asking: *'how much pain have you had over the past 24h (past week)*, on average, on a scale between 0-10, where 0= no pain, and 10= worst pain imaginable'

General remarks: Severe chronic pain (W. Mitchell):

"Perhaps few persons who are not physicians can realize the influence which long-continued and unendurable pain may have on both body and mind. Under such torments the temper changes, the most amiable grow irritable, the bravest soldier becomes a coward…

“Nothing can better illustrate the extent to which these statements may be true than the cases of burning pain, or, as I prefer to term it, ***Causalgia***, the most terrible of all tortures which a nerve wound may inflict."





Diagnosis – the four categories:

Disproportionate pain

a) Colour change √

Temperature change

b) Swelling √

Sweating

c) Motor dysfunction with normal EMG!

Hair and Nail growth abnormalities √

d) Allodynia √

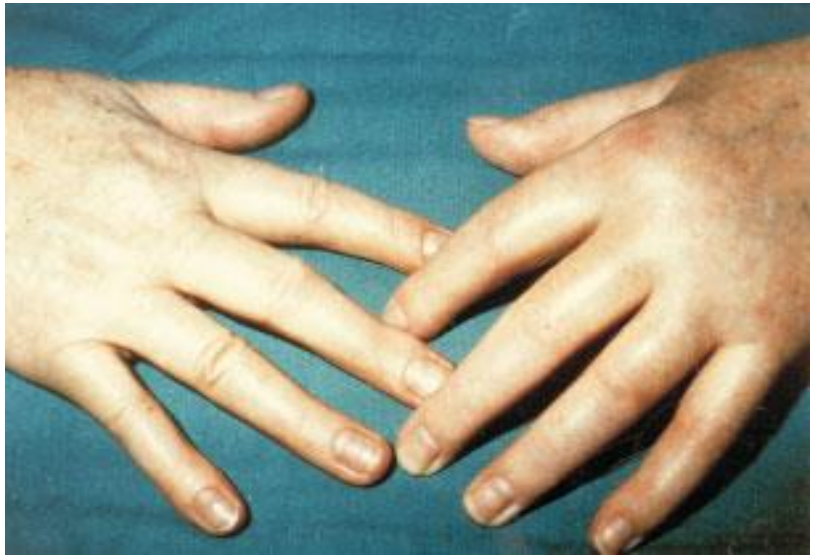
Hyperalgesia

No other diagnosis can explain pain

How common is this condition?

- ✧ Incidence: between 5-26/100,000 – as frequent as rheumatoid arthritis, much more common than MS
- ✧ Prevalence: 1 in 2000 people have severe CRPS
- ✧ About 6000 with severe CRPS in Greater London
- ✧ All ages, but rare in children, most common age 40-60 (severe), 60-75 (milder)
- ✧ Associated with asthma, migraines, osteoporosis, and ACE inhibitor intake
- ✧ 93% post trauma

Chronic complex regional pain syndrome:



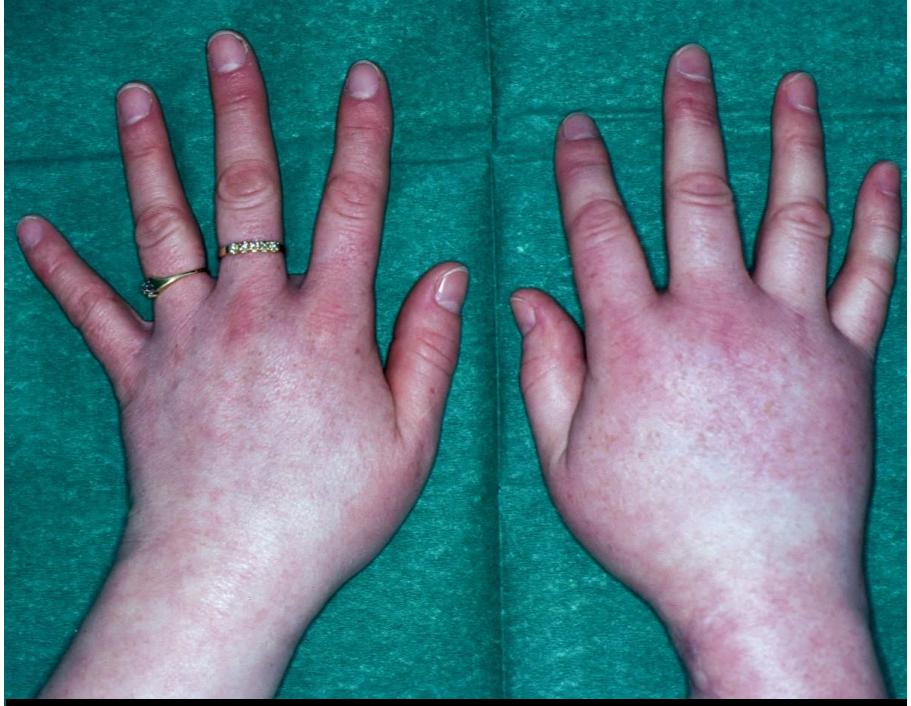
15% of patients:

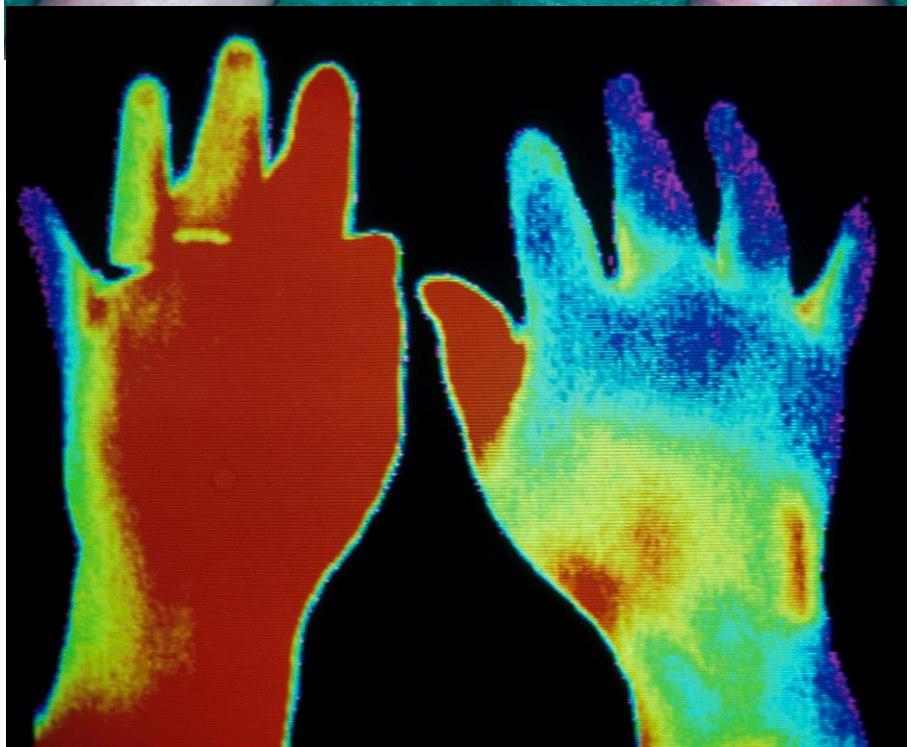
Colour changes, swelling, shininess, hair and nail-growth changes, swelling generally mellow, but pain remains high

Diagnosis is important

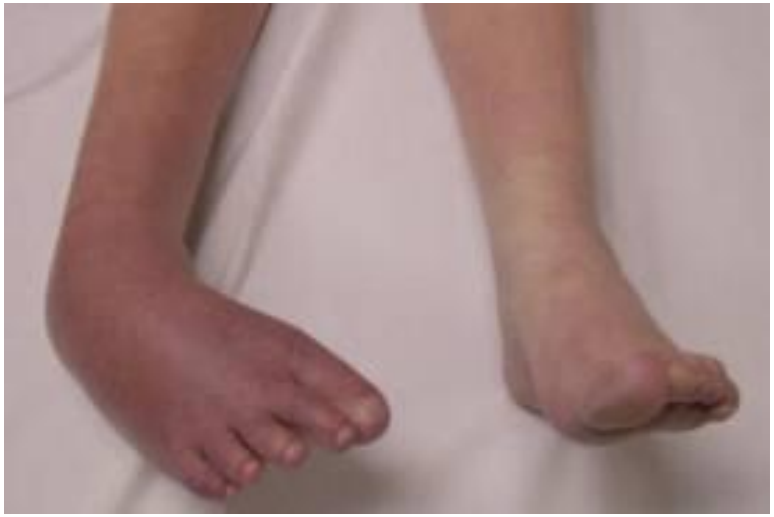
- ✧ Injury does not ‘cause’ CRPS in the classical sense: there is virtually no relationship between either the severity, or the type of trauma, and the severity or permanence of the condition: *a needlestick injury can cause CRPS as much as a severe motorcycle accident.*
- ✧ Once CRPS has started, the patient has, per definition developed a pain-, or neurological-condition, no matter what the orthopedic background
- ✧ Because there are no accepted laboratory tests, the diagnosis is purely clinical; it requires expertise – you need a medical expert who can provide this, generally from Pain Medicine, occasionally from Rheumatology, Neurology, or Orthopedics

Diagnosis: Tests





Diagnosis: rare signs - fixed abnormal postures (‘CRPS-dystonia’)



Diagnosis – the sub-types

CRPS I – without associated nerve injury (much more common)
CRPS II – with associated injury to a major nerve

- ✧ These types are very similar, but in CRPS II the cause for the nerve injury needs to be clarified - CRPS does not cause major nerve injury
- ✧ CRPS NOS – (not otherwise specified) – an umbrellla term for patients not fitting Budapest criteria, including those with documented Budapest signs in the past, but which are now lost, and those who never had all Budapest signs, but who would have fulfilled '*old IASP*' criteria.
- ✧ CRPS NOS has a low specificity, and it is poorly researched – what does this mean for your ML practice?

Alternative diagnoses put forward in the ML field:

‘Psychogenic pseudo-neurological dysfunction vs. structural neuropathology’

Verdugo and Ochoa, 2004

‘Somatoform disorder’, ‘somatisation disorder’, ‘psychogenic disorder’

Schott GD, Pain, 2007; Schrag et al, Brain, 2004

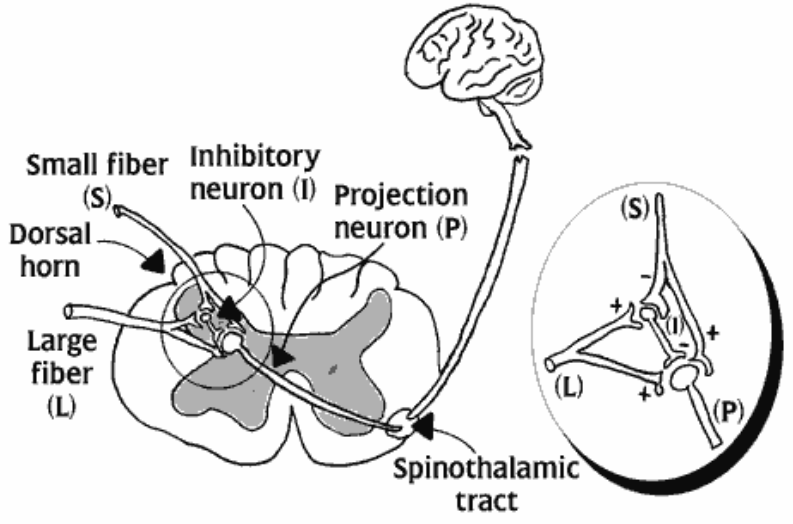
Diagnosis and causation - issues in the medicolegal field

- The patient's own doctor does not believe in CRPS (rare)
- The defendant's medical expert does not believe in CRPS (rare with Pain Medicine experts)
- The defendant's medical expert believes that CRPS is all in the head – that it has a psychological/psychiatric basis
- The defendant's expert suggests over-exaggeration, and even malingering
- Make sure your expert has some background knowledge about more recent scientific evidence

‘Is it organic or is it psychogenic?’

What is pain: history

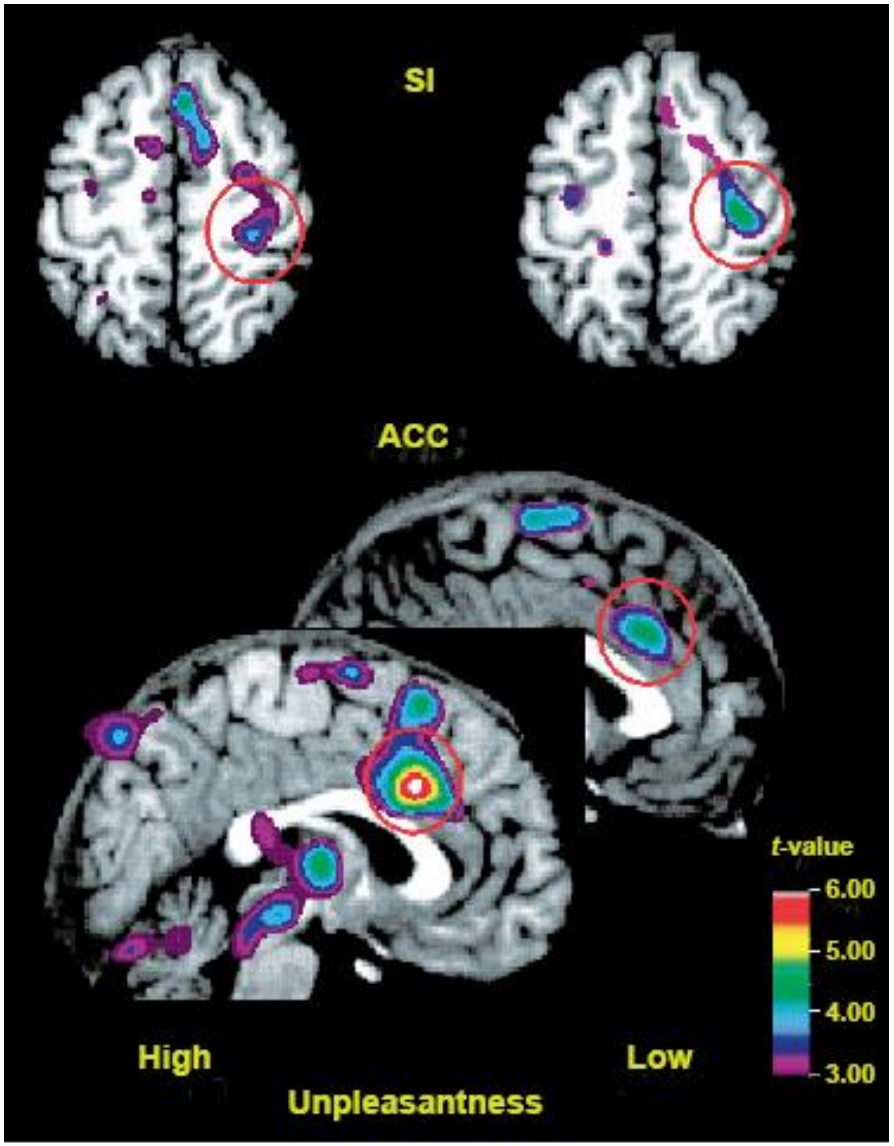
Descartes, 1633



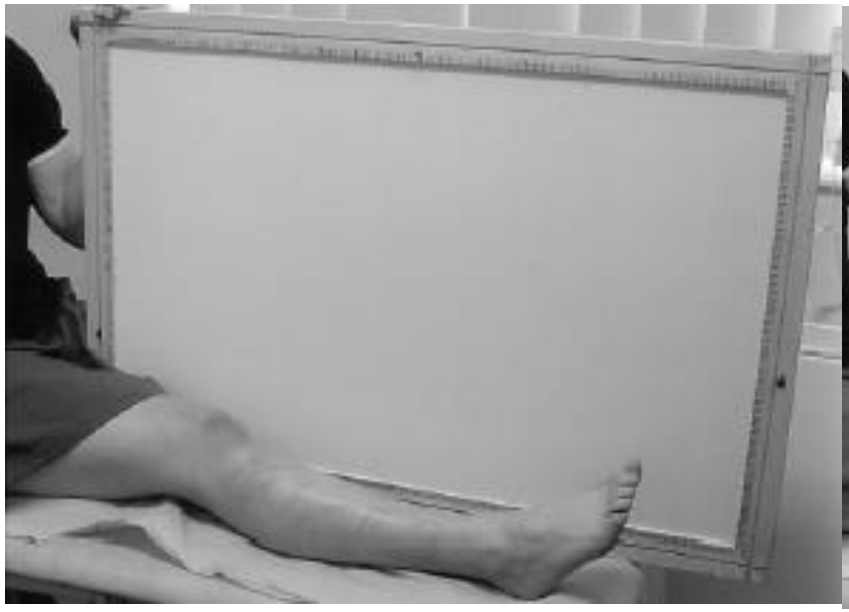
Melzack, Wall, 1965

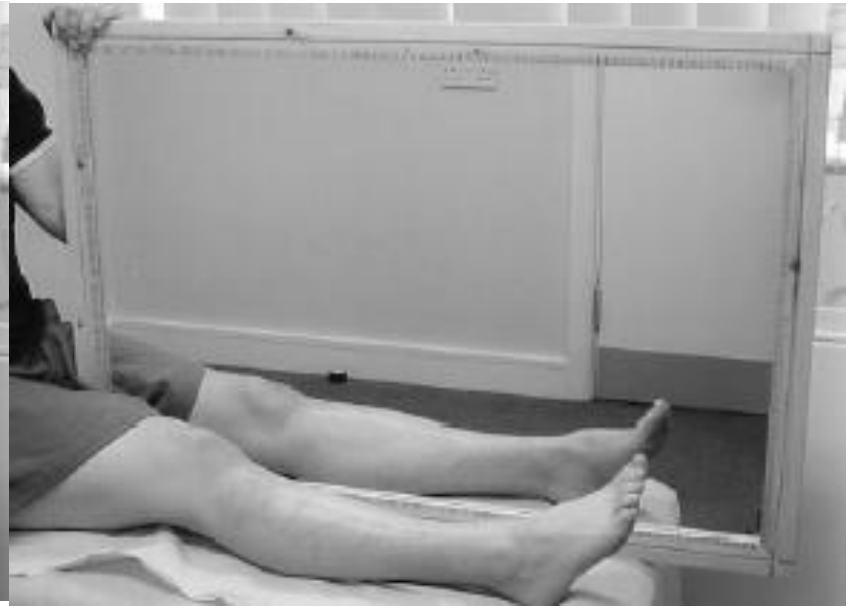
Pain is a ‘Biopsychosocial’ phaenomenon

(Engels, Science, 1977)



Rainville et al., Science, 1997





McCabe, 2003

CRPS prognosis – severity and duration

- ‘Psychiatric issues associated with CRPS can lead to the perception of increased disability as opposed to an attempt to mislead or exaggerate’ (Law Gazette)
- Most people (6 out of 7) with CRPS will retain a degree of ongoing disability, but will not badly suffer
- 15% of patients will badly suffer daily, long term
- There are no established prognostic markers
- CRPS is monophasic in 95% of patients (once it has gotten much better it usually does not come back)

CRPS prognosis

- The vast majority of patients who get better will do so within the first 6 months.
- There is a substantial proportion of patients who will get better up to 2 years after injury
- Very few patients will get better quickly thereafter. In more patients there is possibly a very slow improvement over many years
- ‘Provisional damages ought always to be considered in the event that settlement occurs during a period of few or no symptoms’?

The Legal Team's role

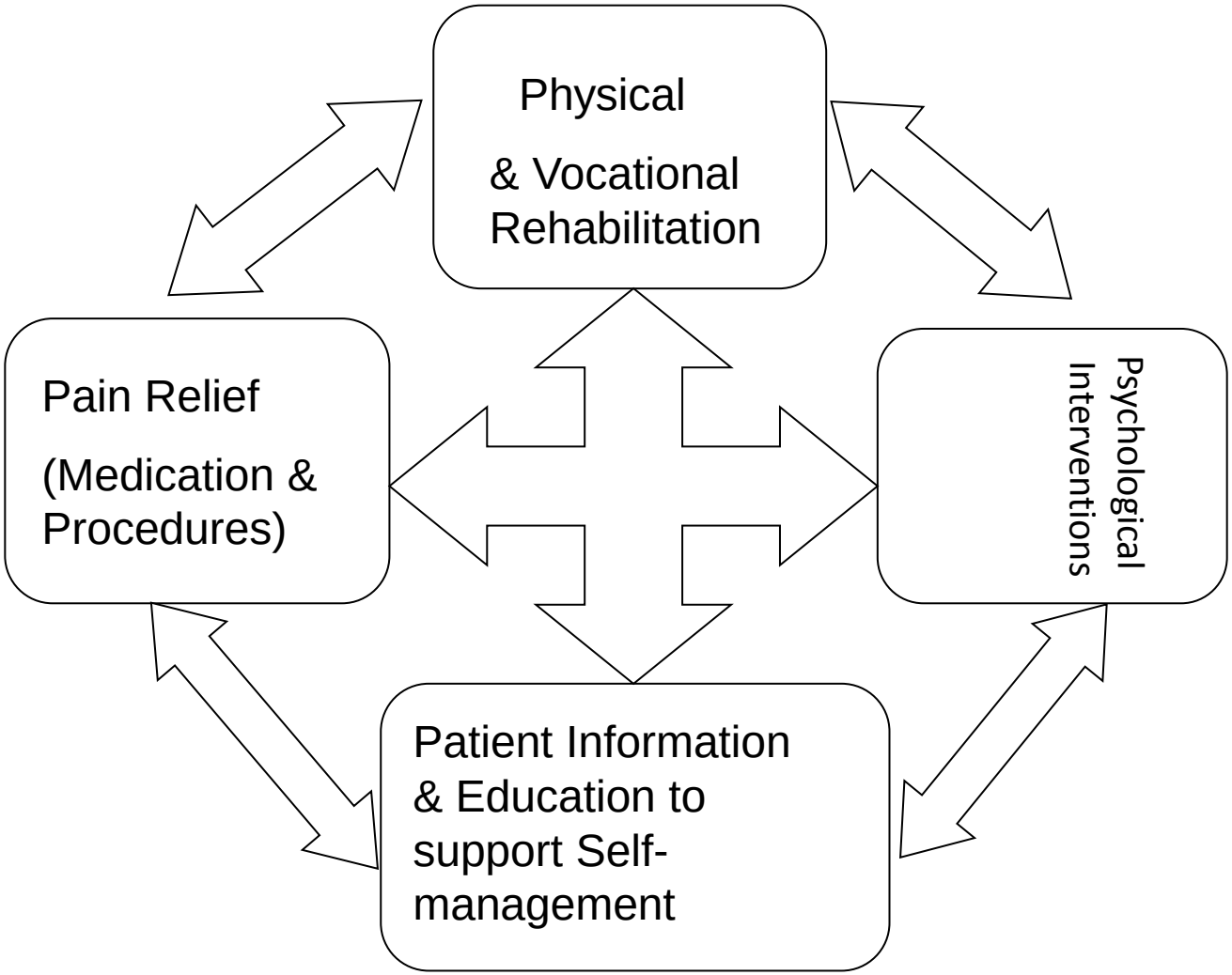
'CRPS cases are difficult…. A degree of hand-holding will be required… . Sometimes the outcome and prognosis will not be clear, and this will be a difficult concept for the client to fathom. As the lawyer, you will be the catalyst attempting to organise, arrange and bring together the best outcome for the client….. . Compensation will help, but it will not be claimants' main objective - this will often be an unattainable recovery, which just adds to the psychological trauma these cases often present.'

Campbell and Evans, Law Gazette April 2014

CRPS management

http://www.rcplondon.ac.uk/resources/complex-regional-pain-syndrome-guidelines

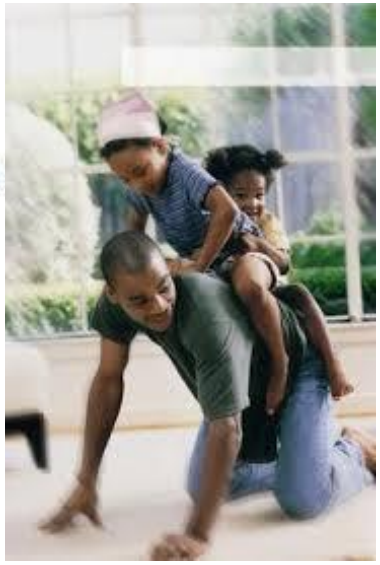
Management of CRPS



RCP, 2012

Offering pain management in the ML field

- ✧ The psychosocial environment is very influential in determining how a patient manages chronic pain, and how the pain impacts on their daily life – what they can still do, how they feel
- ✧ In addition, above a certain pain intensity level, it becomes extremely challenging to keep any sort of balance in life, for most of us
- ✧ Therefore patients with severe chronic pain should be offered attendance at a comprehensive pain management program (‘rehabilitation’), to learn skills, as early as possible – this can only be helpful to both the claimant-, and the defendant sites
- ✧ The PMP might mildly reduce CRPS pain, it will often support people to find a helpful daily routine – it will not cure the pain



VANDERBILT PAIN REHABILITATION PROGRAM

A Path for Managing Your Pain

Journal of
Observational Pain Medicine

JoOPM

Early Treatment in CRPS: A Patient's Perspective

Zoe Branka Holland BA (Hon), Qualified Solicitor

Cast removed in orthopaedic clinic. Discussion with orthopaedic surgeon re burning pain and mottled appearance. Reassured and told to increase movement in arm and wrist.

Orthopaedic review: I enquired whether increasing pain was normal. Again, reassured and physiotherapy is planned. On waiting list for NHS physiotherapy.

Pain in arm continues. Pain and burning pain spreads to full hand, including digits.

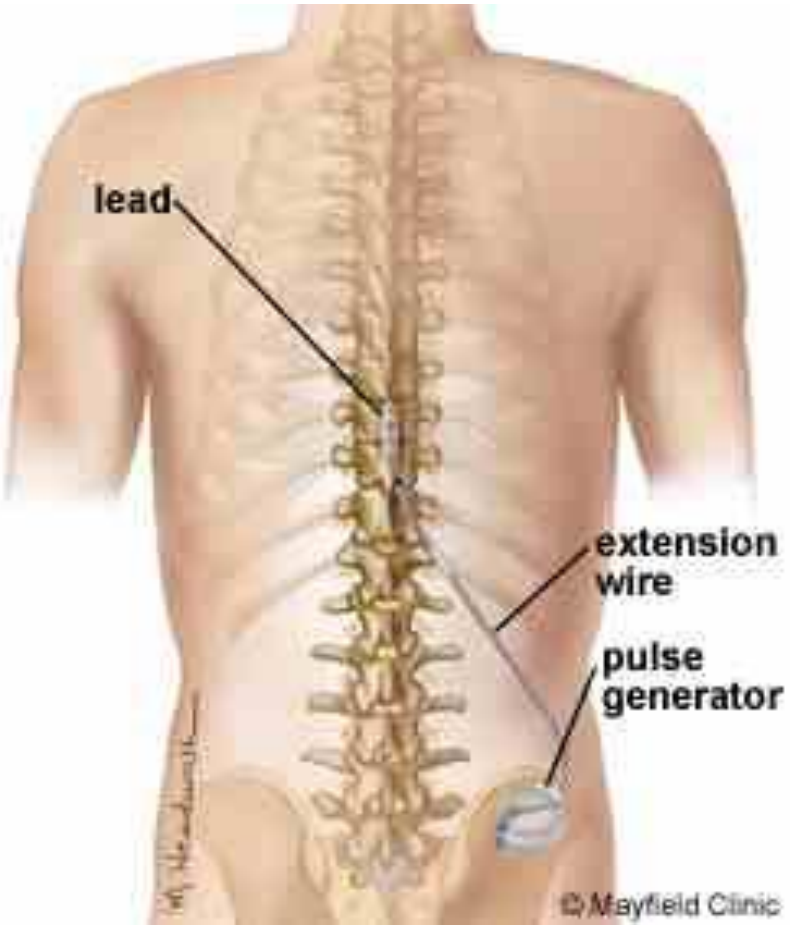
Train trip to London for business and, on return journey, the pain becomes unbearable. Difficulty typing because the pain makes me feel nauseous; my arm is now extremely painful.

I research private physiotherapy and an urgent appointment is made.

Sensations of heat and extreme cold commence. Colour change in arm and hand, with pain radiating up towards upper arm. Mottling appearance on occasions.

Heightened sensitivity to cuffs, material and touch. Altered sensation in hand and arm. I notice that when washing face, the palm of the hand feels gritty.

I notice that the affected arm feels larger and heavier than the non-affected arm.

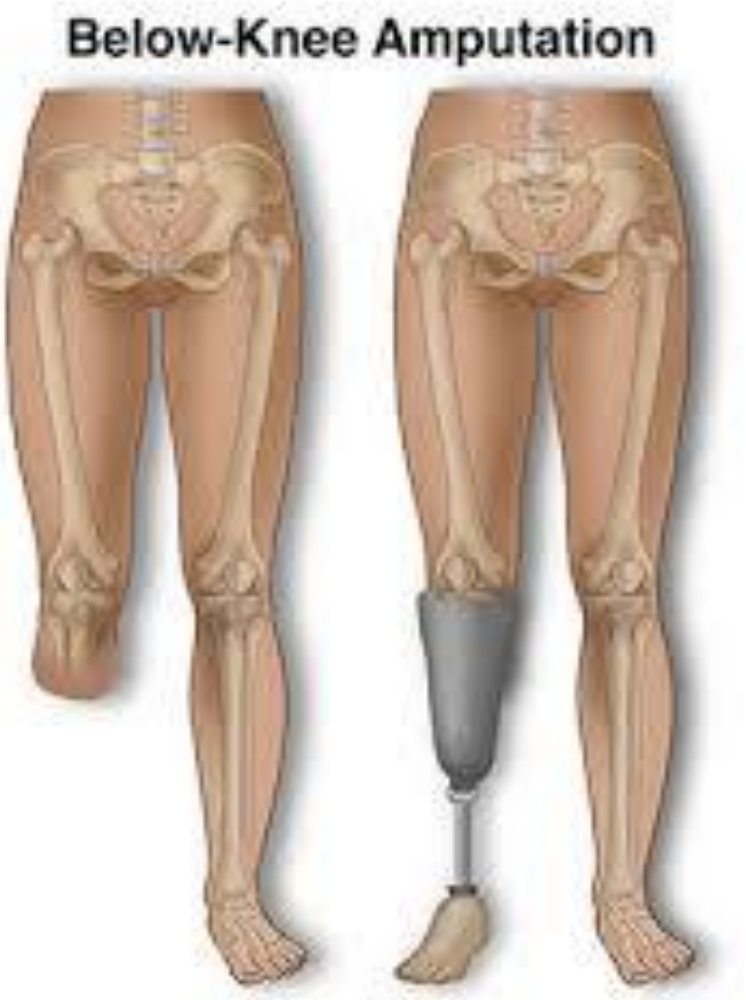


Spinal cord stimulator treatment

Informed Decision-Making Regarding Amputation for Complex Regional Pain Syndrome Type I

Marlies I. Bodde, MD, Pieter U. Dijkstra, PhD, Ernst Schrier, MSc, Jan J. van den Dungen, PhD, Wilfred F. den Dunnen, PhD, and Jan H. Geertzen, PhD

Investigation performed at the Department of Rehabilitation Medicine, Center for Rehabilitation, and the Department of Pathology and Medical Biology, University Medical Center Groningen, University of Groningen, the Netherlands



Case example 1 – O.S., a 43 year old police officer develops pain in her right knee, which starts after a chase- and restraining of a suspect. She finds walking beyond ½ miles very uncomfortable. There is only little discomfort at rest. An arthroscopy reveals limited cartilage damage in the lateral compartment, and moderate mal-alignment, which likely preceded the pain onset, but is now considered to contribute to it. An Osteotomy is recommended to correct the malalignment.

The patient develops CRPS after the osteotomy. She is unable to walk more than 5 yards without 9/10 pain. She has 7-8/10 pain on rest (burning and 'like a vice'). She contacts a injury law firm about this complication, 17 months after CRPS onset, at which stage she is in the process of being medically retired.
How will you progress her case?

Case example: L.T., a 28 year old corporal, was pushed on 04.2013 on tour in Irak while entering a Helicopter, fell and twisted his right ankle. He developed immediate pain and swelling, which did not resolve at barracks, so that he was transferred to the operational medial treatment center. He did not improve with 'hand's on' physiotherapy treatment. He developed some abnormal hair growth over the forefoot. He was unable to tolerate his duvet at night.

After transfer back to the UK he had additional physiotherapy, and his morphine was up-titrated. An army orthopaedic surgeon, after MRI scan review suggests that L.T. ought to have more intensive rehabiliation, however the referral got lost. He continues to receive treatment locally. In March 2015, after a review by the an army pain nurse, he is being referred to the UK national armed forces rehab centre, who diagnose CRPS.
He contacts a solicitor with regards to his medical management.
How will you approach his case?

Acknowledgements:

Julian Benson (Guildhall, Bristol)

http://www.lawgazette.co.uk
/law/practice-points/
complex-regional-pain/5040961.fullarticle

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