

Managing CRPS: always involves physiotherapy

Concurrent Care Pathways for Acute CRPS

CRPS diagnosis using Budapest diagnostic criteria

NB: Follow intervention pathway even if does not fully meet CRPS diagnostic criteria but avoid giving patient diagnosis. Liaise at all stages with primary care

Therapies interventions

Physiotherapy +/- occupational therapy including CRPS therapy specialist review ASAP e.g. encourage attention to limb, functional rehabilitation, consider Graded Motor Imagery

Orthopaedic / Trauma clinic

Simple analgesia +/- weak/moderate opiates +/- neuropathic pain medication
NB stop ineffective medications.
Liaise with primary care citing RCP CRPS guidelines if relevant

Poor treatment response at 6-8 weeks from diagnosis

Specialist physiotherapy +/- occupational therapy

e.g. Graded Motor Imagery, sensory discrimination/acuity training, perceptual rehabilitation, desensitisation, functional rehabilitation, pacing + relaxation

Local pain specialist referral

Interventions are focussed to facilitate functional rehab e.g. specialist pain medications, bisphosphonate infusions, local blocks, coping strategies, psychological interventions + research interventions

Poor treatment response at >6/12 from diagnosis

Specialist physiotherapy +/- occupational therapy continues

May be taken over by Regional Pain Specialist Service is appropriate

Regional Pain Specialist referral

Interventions focussed on functional rehab and may include research interventions, spinal cord stimulation, chronic pain management programmes.

Further reading

Royal College of Physicians Complex Regional Pain Syndrome in adults UK guidelines for diagnosis, referral and management in primary and secondary care 2018 2nd edition <https://www.rcplondon.ac.uk/guidelines-policy/complex-regional-pain-syndrome-adults>

Cowell F, Gillespie S, Cheung G, Brown D. Complex regional pain syndrome in distal radius fractures: How to implement changes to reduce incidence and facilitate early management Journal of Hand therapy 31 (2018) 201-205

Gillespie S, Cowell F, McCabe C, Goebel A. Complex regional pain syndrome acute care pathways in England: Do they exist and what do they look like? Hand Therapy 2018 Volume: 23 issue: 3, page(s): 95-99

Gillespie S, Cowell F, Cheung G, Brown D. Can we reduce the incidence of complex regional pain syndrome type 1 in distal radius fractures? The Liverpool experience Hand Therapy 2016, Volume: 21 issue: 4, page(s): 123-130



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Complex Regional Pain Syndrome (CRPS)

Prevention and Management

Where we all make a difference

CRPS UK Clinical & Research
Network



Putting it together

How to prevent CRPS - Our Gold Standard

- Always change a plaster if a patient complains of tightness / 'claustrophobia' / digit restriction.
- Use splint / boot as an alternative if this provides adequate support.
- Avoid over-positioned plasters e.g. over flexed hand.
- Ensure unrestricted unaffected joint motion and encourage light function.
- 500mg Vitamin C daily for the first 21 days helps prevent CRPS but is not effective when CRPS developed.
- Patient with reduced but unstable wrist fracture complaining of excessive pain at 1-2 weeks. Consider ORIF and early free motion before develops other signs and symptoms of CRPS.

Diagnosing CRPS: use Budapest criteria

Table 1 Diagnostic criteria for CRPS (Budapest criteria) ¹⁷ (A–D must apply) †			
A) The patient has continuing pain which is disproportionate to any inciting event <input type="checkbox"/>			
B) The patient has at least one sign in two or more of the categories <input type="checkbox"/>			
C) The patient reports at least one symptom in three or more of the categories <input type="checkbox"/>			
D) No other diagnosis can better explain the signs and symptoms <input type="checkbox"/>			
Category		Sign (you can see or feel a problem)	Symptom (the patient reports a problem)
1 'Sensory'	Allodynia (to light touch and/or temperature sensation and/or deep somatic pressure and/or hyperalgesia (to pinprick))	<input type="checkbox"/>	Hyperesthesia does also qualify as a symptom <input type="checkbox"/>
2 'Vasomotor'	Temperature asymmetry and/or skin colour changes and/or skin colour asymmetry	<input type="checkbox"/>	If you notice temperature asymmetry: must be >1°C <input type="checkbox"/>
3 'Sudomotor/oedema'	Oedema and/or sweating changes and/or sweating asymmetry	<input type="checkbox"/>	<input type="checkbox"/>
4 'Motor/trophic'	Decreased range of motion and/or motor dysfunction (weakness, tremor, clystonia) and/or trophic changes (hair/nail/skin)	<input type="checkbox"/>	<input type="checkbox"/>

Key messages - Keep moving, Keep active



What to do if you suspect CRPS

- Identify 'at risk patients' and involve senior clinic physiotherapist early:
- Warning signs:
 - multiple plaster changes.
 - neglect of limb / angry with limb.
 - reports 'claustrophobia' in plaster.
 - reports 'limb does not feel like my own'.
 - uncontrolled pain whilst in plaster by 2 weeks.
 - had restricted unaffected joint motion whilst in Plaster.
- Do not label the patient as having CRPS unless they fit the Budapest criteria and even then choose your words with care.

Interventional Pathway in Acute CRPS to facilitate function

Meets Budapest diagnosis criteria for CRPS / has some of the features of CRPS

Day 1

Physiotherapy/occupational therapy.

Paracetamol.
+/- NSAIDS.
+/- weak opiates (e.g. cocodomol/ codydramol/dihydrocodeine).

Consider neuropathic pain meds.

Liaise with primary care referring to RCP CRPS guidelines if meets criteria.

Week 2-4

Moderate opioids e.g. tramadol.
+/- neuropathic pain meds e.g. amitriptyline low dose or pregabalin.

Concurrent physiotherapy +/- occupational therapy essential.

Liaise with primary care referring to RCP CRPS guidelines if meets criteria.

Week 6-8

Poor treatment response to medication and therapies and/or high levels of distress or anxiety.
Concurrent specialist physiotherapy + occupational therapy essential.

Refer to local pain team

Liaise with primary care referring to RCP CRPS guidelines if meets criteria.

>6 months duration of symptoms

Poor treatment response to pain interventions and specialist physiotherapy + occupational therapy.
+/- meets criteria for research interventions.
+/- persistent harmful pain beliefs.
+/- poor pacing.

Refer to Regional Pain Specialism

Liaise with primary care referring to RCP CRPS guidelines.

Explain the need for adequate medication whilst symptomatic to facilitate function which is associated with a faster, more complete recovery. Stop ineffective medications