The Royal Liverpool and Broadgreen University Hospitals
NHS Trust

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 Budapes

Table 1 Diagnostic criteria for CRPS (Budapes	
A) The patient has continuing pain which is dispro	
B) The patient has at least one sign in two or more	
C) The patient reports at least one symptom in thr	
D) No other diagnosis can better explain the signs	
Category	
1 'Sensory'	*Allodynia* (to light tou and/or temperature and/or deep somatic and/or *hyperalgesia* pinprick)
2 'Vasomotor'	Temperature asymm and/or skin colour ch and/or skin colour as
3 'Sudomotor/oedema'	Oedema and/or swea changes and/or swea asymmetry
4 'Motor/trophic'	Decreased range of m and/or motor dysfun (weakness, tremor, d and/or trophic chang (hair/nail/skin)

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 cho

Interventional Pathway in Acu

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 opiods e.g. tramadol.
+/- neuropathic pain meds e.g. amytriptiline low dose or pregabalin

Concurrent physiotherapy +/- occupational therapy essential.

Liaise with primary care referring to RCP CRPS guidelines if meets criteri

Explain the need for adequate medication whilst symptomatic to facilitate function whi

t criteria

st criteria)[17] (A–D must apply)†		
portionate to any inciting event		☐
e of the categories		☐
ee or more of the categories		☐
and symptoms		☐
	Sign (you can see or feel a problem)	**Symptom (the patient reports a problem)**
uch sensation pressure (to	☐	Hyperesthesia does also qualify as a symptom ☐
etry anges ymmetry	If you notice temperature asymmetry: must be >1°C ☐	☐
ating ating	☐	☐
notion ction lystonia) ges	☐	☐

ose your words with care.

Key messages - Keep moving, Keep active

ute CRPS to facilitate function

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 physiotherpy + occupational therpy.
+/- 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.

ch is associated with a faster, more complete recovery. Stop ineffective medications

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	**Orthopaedic / Trauma clinic**
Physiotherapy +/- occupational therapy including CRPS therapy specialist review ASAP e.g. encourage attention to limb, functional rehabilitation, consider Graded Motor Imagery	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	**Local pain specialist referral**
e.g. Graded Motor Imagery, sensory discrimination/acuity training, perceptual rehabilitation, desensitation, functional rehabilitation, pacing + relaxation	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	**Regional Pain Specialist referral**
May be taken over by Regional Pain Specialist Service is appropriate	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

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