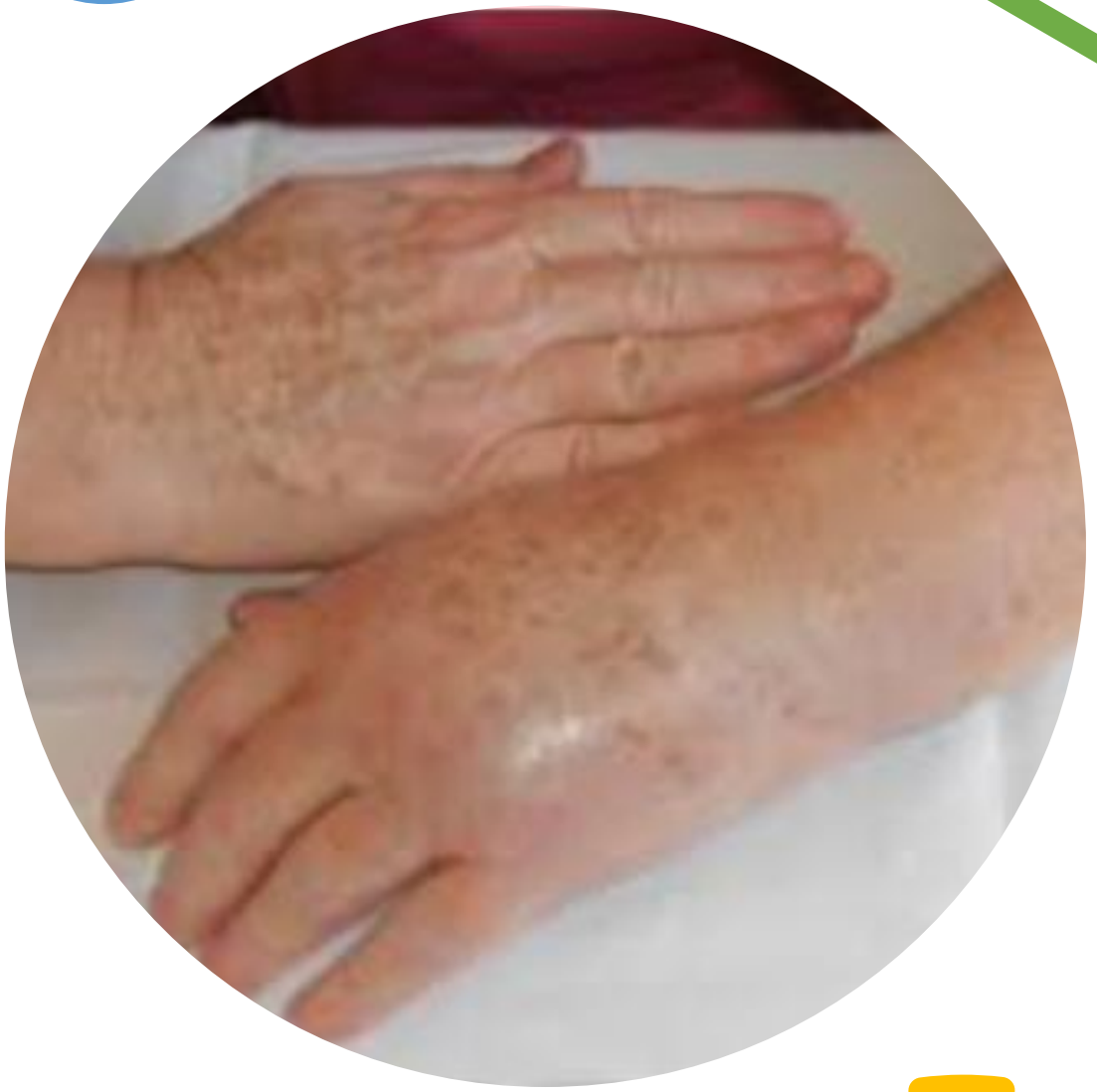

Complex Regional Pain Syndrome

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Chronic pain Service NHS Highland

2021

Introduction/ Session Outline

Discuss NHS Highland CRPS Pathway Early recognition and pain management and education key.

Understand sign and symptoms

NHS Highland Neuropathic Formulary

Graded Motor Imagery/ Functional Rehab

Orthopaedic Hand Service: OT / Physio / Hand Surgeon

Other options in pain clinic IV Lidocaine infusions / biophosphates/ Local and National pain management programme/ Lumbar Sympathetic Block /Stellate Gangion injection

Signposting to key resources that can help with pain. Noi group recognise App, NHS CRPS / GMI leaflets/ Burning Nights.com

CRPS

Complex Condition

Type 1 (no nerve compromise) Type 2 (compromise to nerve)

Can be after trauma or atraumatic (much less common).

Most common cause following fractured wrist, normally occur within one month of trauma or immobilised limb. Extremities most affected.

Female more than male, middle aged more common

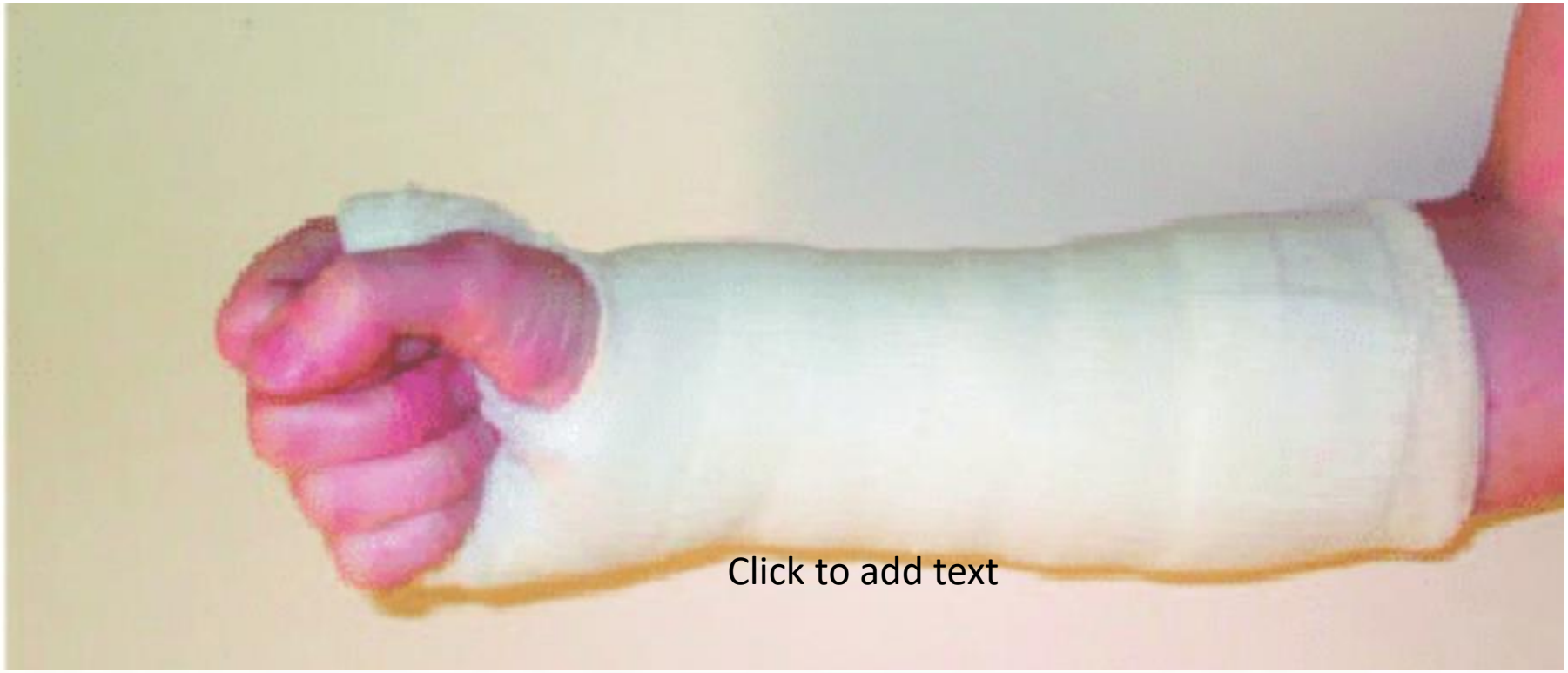
Complex pathology thought to involve many systems: Central, PNS, autonomic, immune system and vascular system.

Early Cortical Changes in brain and sensitivity in spinal cord and nervous system - displaying central signs/ body disturbance .neglect/amplified pain /

Higher risk more complex fracture, vascular compromise, poor plaster positioning in flexion, reduced flexion of fingers and unaffected joints. History trauma / mental illness

Lots still unknown

CRPS is a condition that varies greatly from person to person.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Early Recognition/ Diagnosis

- Suspect CRPS???
- •Identify “at risk patients” **hands & wrists or feet and ankles most common**

Warning signs :

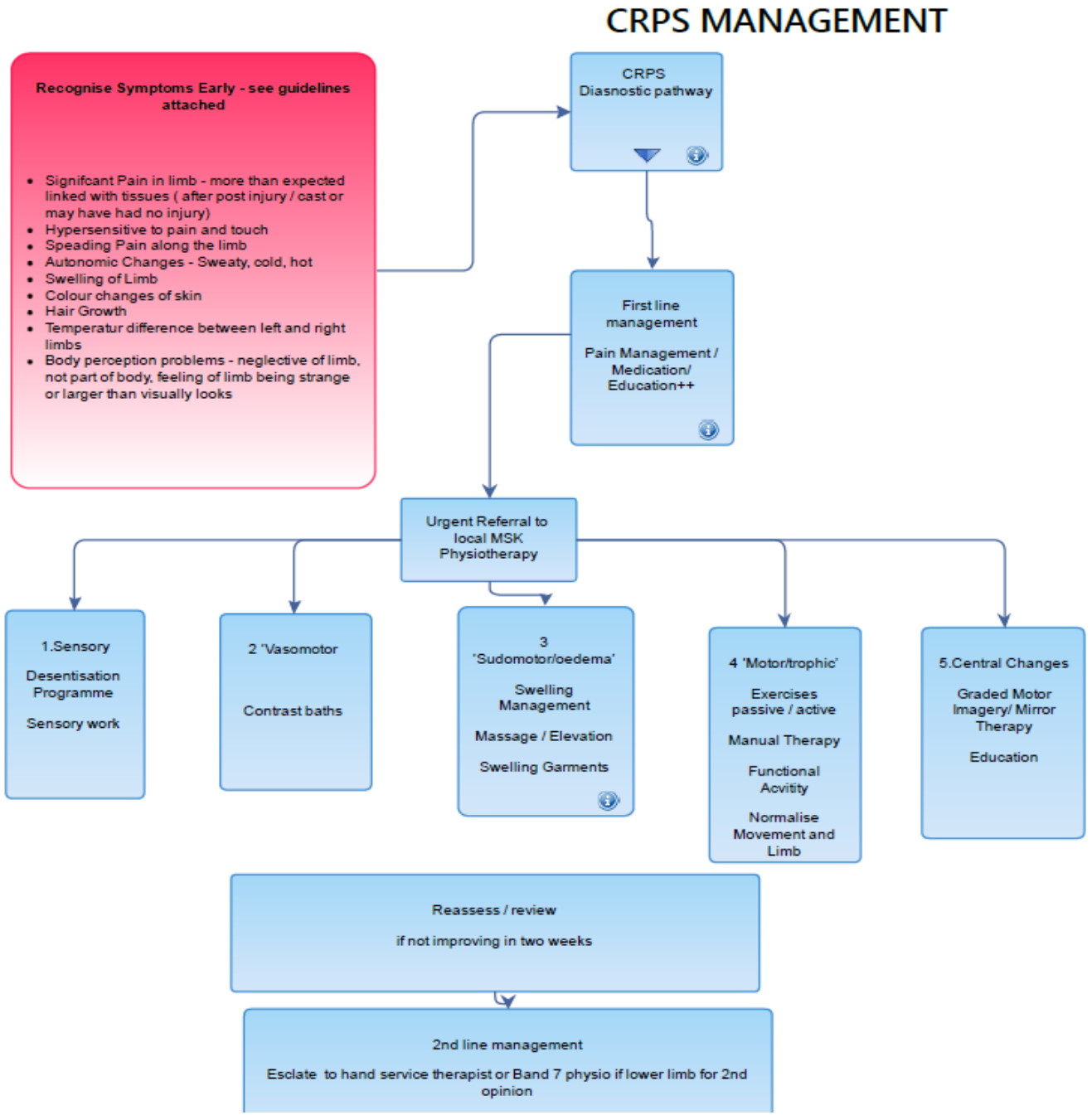
- •multiple plaster changes
- •neglect of limb/ anger with limb
- •reports “claustrophobia in plaster”
- •reports “ limb does not feel like my own”
- •uncontrolled pain whilst in POP by 2 weeks (such as if pain>5- 6 after 2 weeks.)
- •Restricted unaffected joint motion whilst in POP
- •Do not label the patient as having CRPS unless they fit the Budapest criteria and even then choose your words with care.

Budapest Criteria

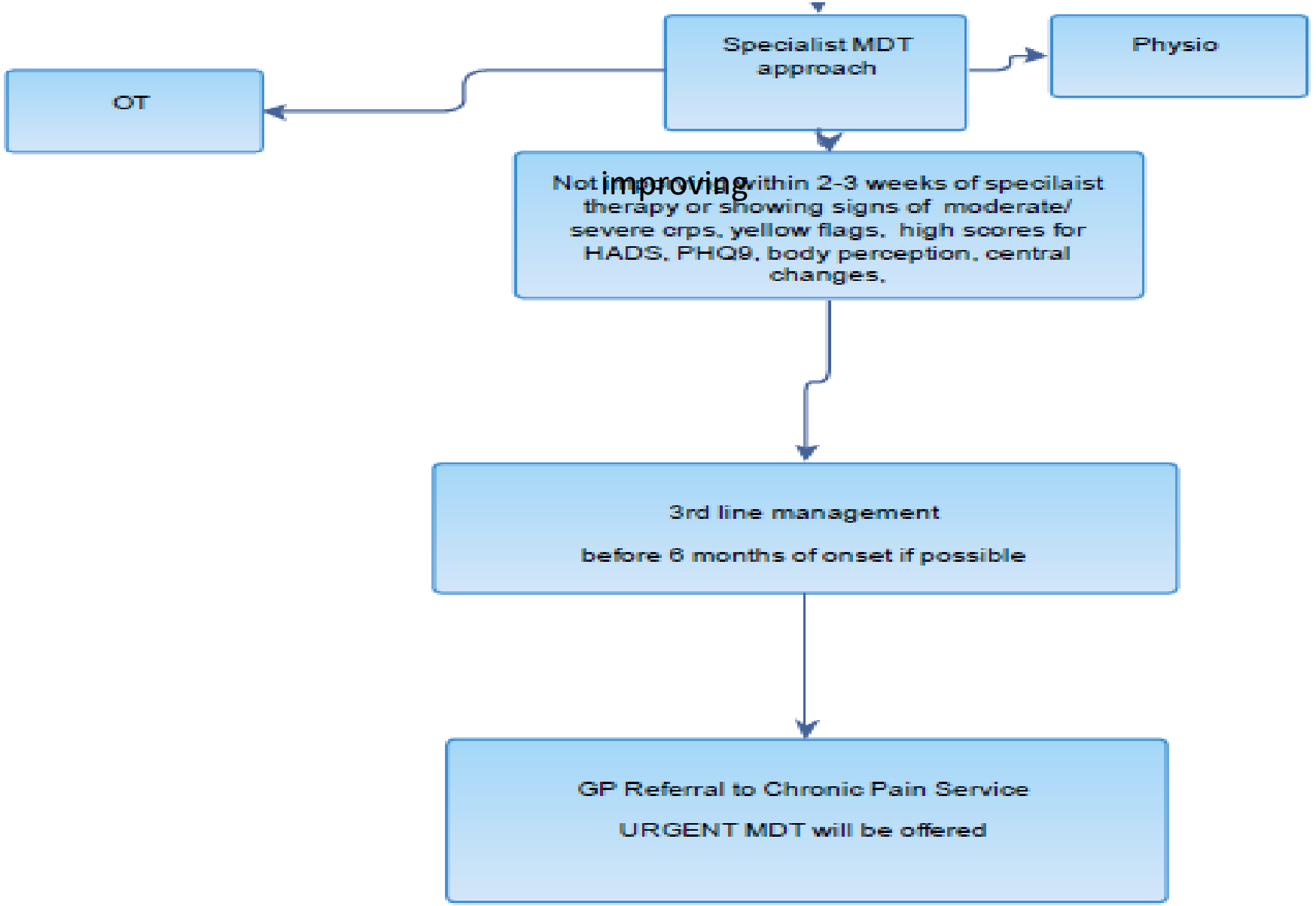
Table 1 Diagnostic criteria for CRPS ('Budapest criteria')[21] (A–D must apply)*

A) The patient has continuing pain which is disproportionate to any inciting event			☐
B) The patient has at least one sign in two or more of the categories			☐
C) The patient reports at least one symptom in three or more of the categories			☐
D) No other diagnosis can better explain the signs and symptoms			☐
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 joint movement) and/or *hyperalgesia* (to pinprick)	☐	*Hyperesthesia* does also qualify as a symptom ☐
2 'Vasomotor'	Temperature asymmetry and/or skin colour changes and/or skin colour asymmetry	If you notice temperature asymmetry: must be >1°C ☐	☐
3 'Sudomotor/oedema'	Oedema and/or sweating changes and/or sweating asymmetry	☐	☐
4 'Motor/trophic'	Decreased range of motion and/or motor dysfunction (weakness, tremor, dystonia) and/or trophic changes (hair/nail/skin)	☐	☐

NHS Highland CRPS Pathway



- http://www.clinicalknowledgepublisher.sc
  k/Published/Viewer.aspx?id=2784


Specialist MDT approach
Physio
OT
improving
Not improving within 2-3 weeks of specilaist therapy or showing signs of moderate/ severe crps, yellow flags, high scores for HADS, PHQ9, body perception, central changes,
3rd line management
before 6 months of onset if possible
GP Referral to Chronic Pain Service
URGENT MDT will be offered

David Butler- Explaining Pain

- Smudging Effect and Theory of Cortical changes / mapping on cortex that can be worked on using neuroplasticity methods graded motor imagery, education reassurance, functional rehab.
- Explaining Brain Smudging - YouTube

This document provides guidance on how best to meet treatment aims in a variety of clinical settings, for both acute and chronic CRPS.

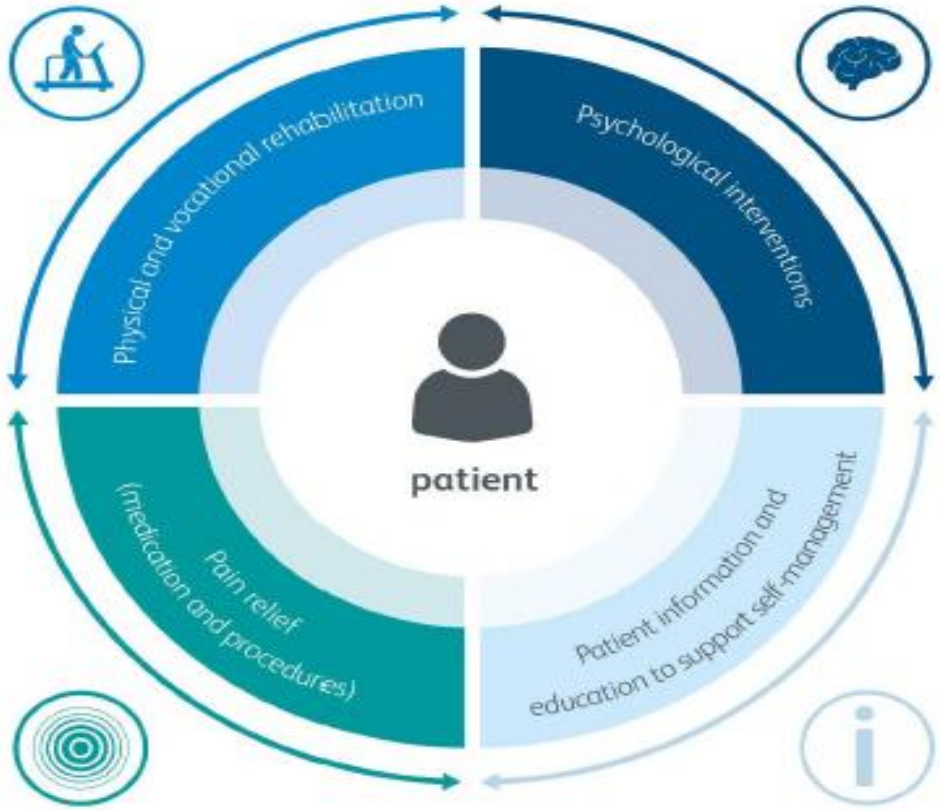
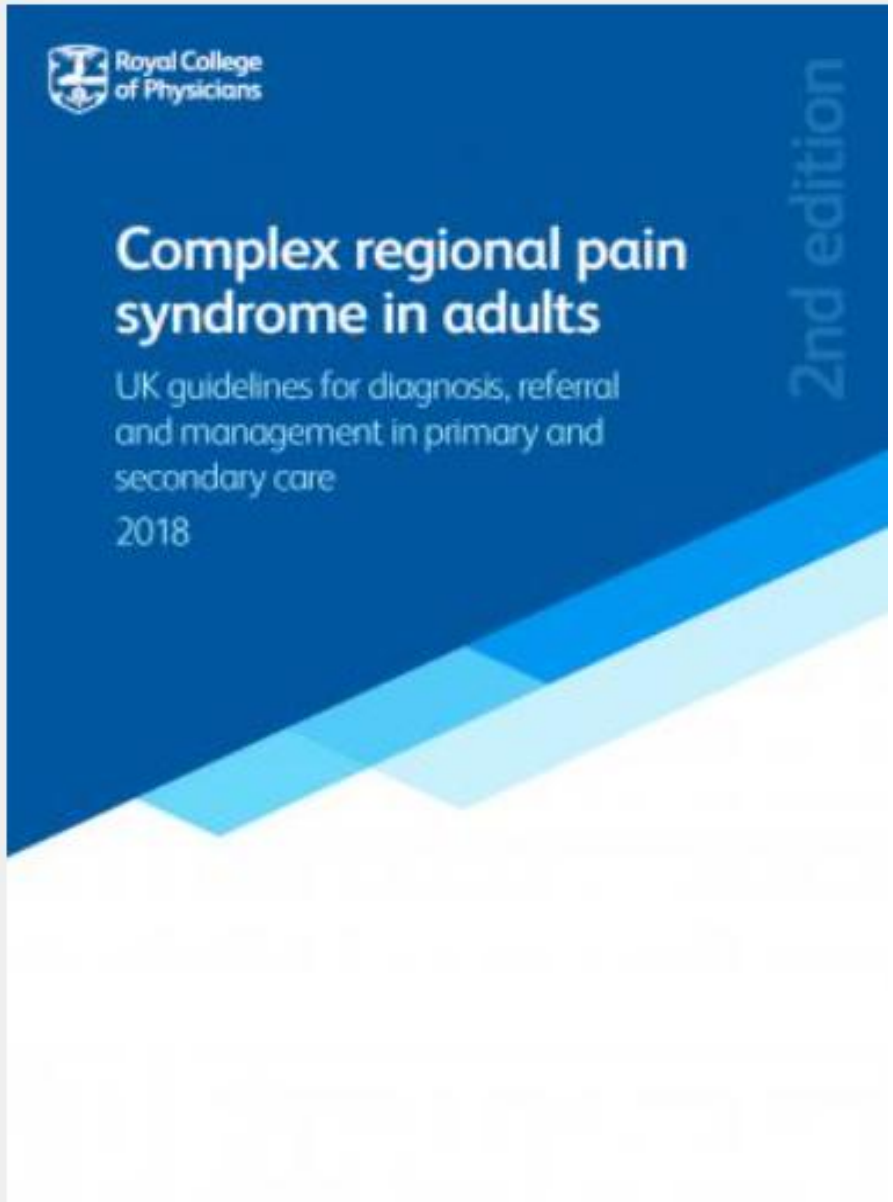


Fig 2 Four pillars of treatment for CRPS – an integrated interdisciplinary approach



Early explanation and pain education / reassurance key.

No licenced medication for CRPS – often in effective in severe cases

Explain the temporary need for adequate analgesia to facilitate function which is associated with a faster, more complete recovery.

Active exercise that emphasises normal use of the affected limb is essential.

Fear avoidance and inactivity of the limb worsens the condition but over activity and forcing painful movements can also worsen the condition (turn the volume up)

Early and regular limb functional graded rehab / weight bearing exercises

OT / Early psychological support if required

2.Liaise with Primary and secondary care throughout to ensure effective shared collaborative care.

3.Stop ineffective medications as often

Mechanism Guided Treatment based on individual need.

Understanding of pain, expectation, impact of function – patient centred – pain centred and help with nervous system sensitivity / treat and pain intensity

Changes in sensory appreciation e.g allodynia Central

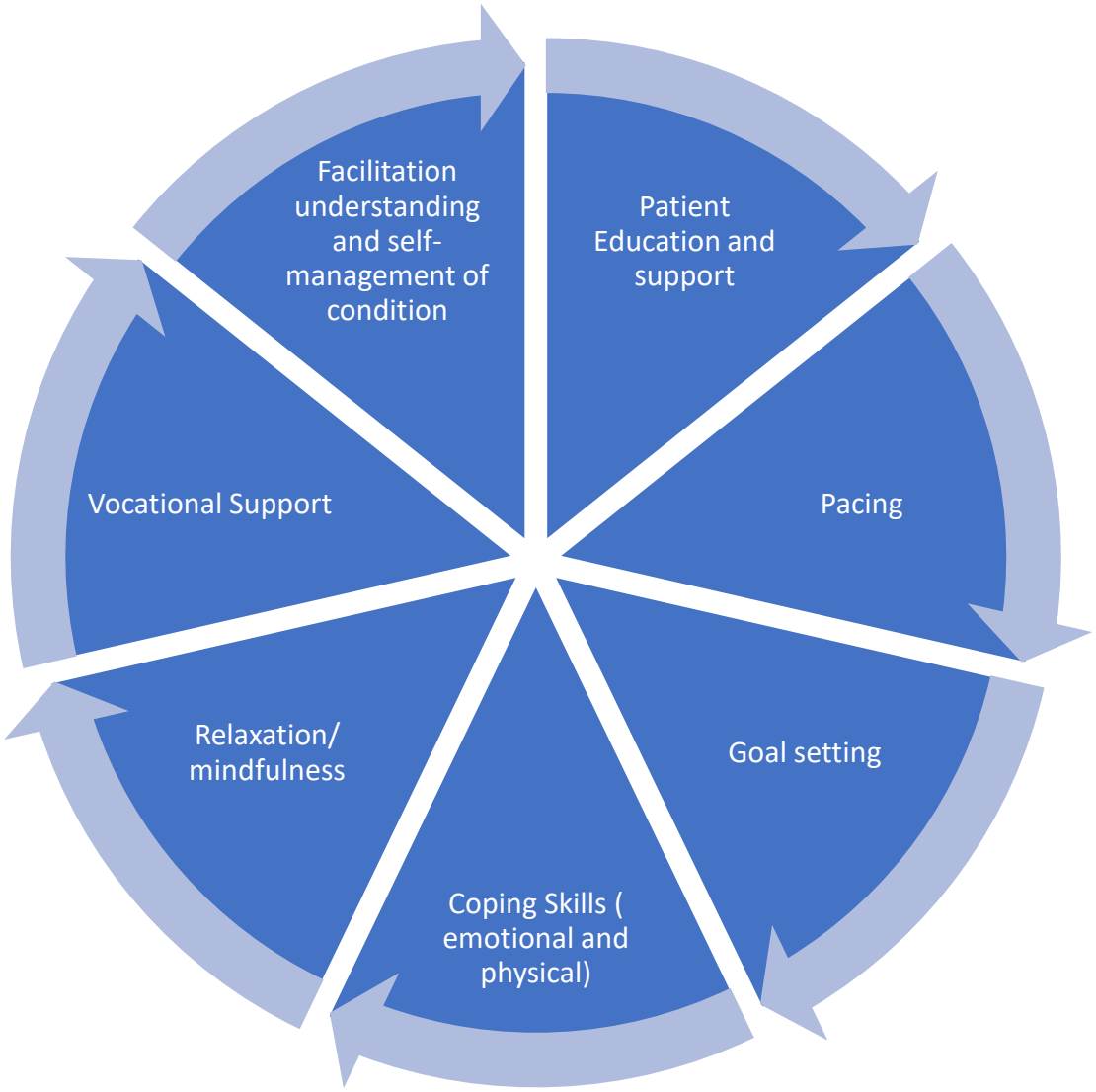
Cortical Changes: Altered body schema, lateral discrimination, reaction times, poor motor planning/ coordination, inability to position or attend to limb, trouble initiating movement, body disturbance

Peripheral Changes e,g soft tissue and stiffness in hand

Treatment Body disturbance

- Looking, touching and thinking about the affected body part
- Mental visualisation to normalise altered size and form perception of affected body part
- Functional movement techniques to improve motor control and awareness of affected limb position / proprioception exercises

Patient Centred Skills



Other Treatments

Tactile and thermal desensitisation with the aim of normalising perception of touch

Lateral left and right discrimination, thinking about movement, mirror movement, through to actual movement) depending on pain intensity.

May need Psychological support / CBT as CRPS can be very distressing and impact on mental wellbeing, if highly distressed consider onward referral to local mental health resources / or secondary care

Medication use

- Neuropathic non-malignant pain (nhsh.scot)
- http://www.nice.org.uk/guidance/CG173
- No licenced drugs specifically for CRPS.
- Offer a choice of amitriptyline/ nortriptyline, duloxetine, gabapentin or pregabalin as initial treatment
- If the initial treatment is not effective or is not tolerated, offer one of the remaining 3 drugs, and consider switching again if the second and third.
- Drugs tried are often not effective or not tolerated.
- Consider tramadol only if acute rescue therapy is needed
- Mild / Moderate opiods can be considered in short term to allow function.
- De-escalate ineffective medicines.

Other options in pain service

- Support Pain management skills / graded motor imagery/ graded function/ life with pain/ education/ signposting/ peer support groups / individual work
- Pain management programmes
- Value base goals/ managing emotions and distress with CRPS/ coping strategies/ psychological therapies
- Medication Review
- IV Lidocaine infusions/ biphosphate infusion
- Lumbar Sympathetic block for lower limb CRPS
- Stellate Gangion Block – very high risk rarely used
- Consultant Referral Spinal cord stimulator – out-with Highland – again rare.
- National pain Management Programme - Glasgow

Signposting for Patients and Staff

- Noi Group – Recognise app resource for staff on GMI /mirror box cards/
- Flippin Pain website for pain management skills
- LGOWIT
- Burning Nights CRPS Website
- Pain Association
- Staff :
- Turas Module on CRPS NHS Highland, recent webinar CRPS

- PPA :Complex Regional Pain Syndrome: Physiotherapy is Key - YouTube

Pain Association Scotland

Let's Get On With It Together
LGOWIT
a partnership supporting self management

Physiotherapy Pain Association

FLIPPIN' PAIN®
Engage | Educate | Empower

BURNING NIGHTS