Chronic complications and pain in sickle cell disease

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Lentiglobin effective for Sickle Cell Disease- medicaldialogues.in/medicine/news/lentiglobin-effective-for-sickle-cell-disease-finds-nejm-study-86519, accessed 2024

CHRONIC PAIN

Most common complication

Chronic pain is an unpleasant , sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage (WHO 2020).

Chronic pain

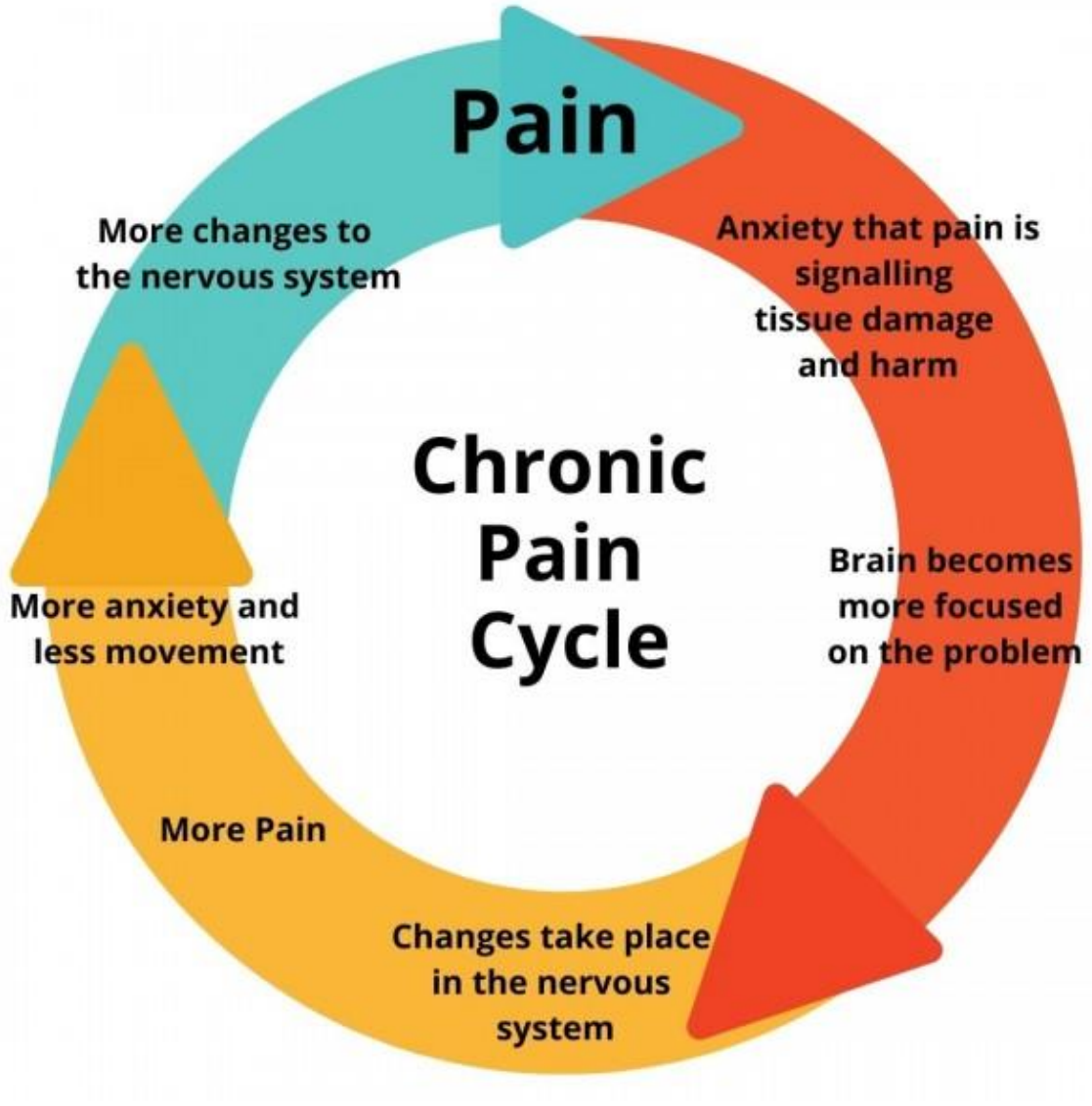
Onset - Gradual

Duration – 3 + months to years

Body site- in all areas

Treatment- continuous

Multi factorial- Can lead to psychological factors, such as depression, anxiety and trouble sleeping. Aswell as financial implications.



Capital Area Physical Therapy and Wellness (2024) The Role of Physical Therapy in Chronic Pain Management

Sickle cell disease complications

Damage caused by acute complications can lead to chronic complications

Many patients with SCD have nerve damage, chronic inflammation and central sensitization.

Each crisis causes deoxygenation and damage to the tissues.

Important to differentiate between acute and chronic pain.

Chronic symptoms and complications

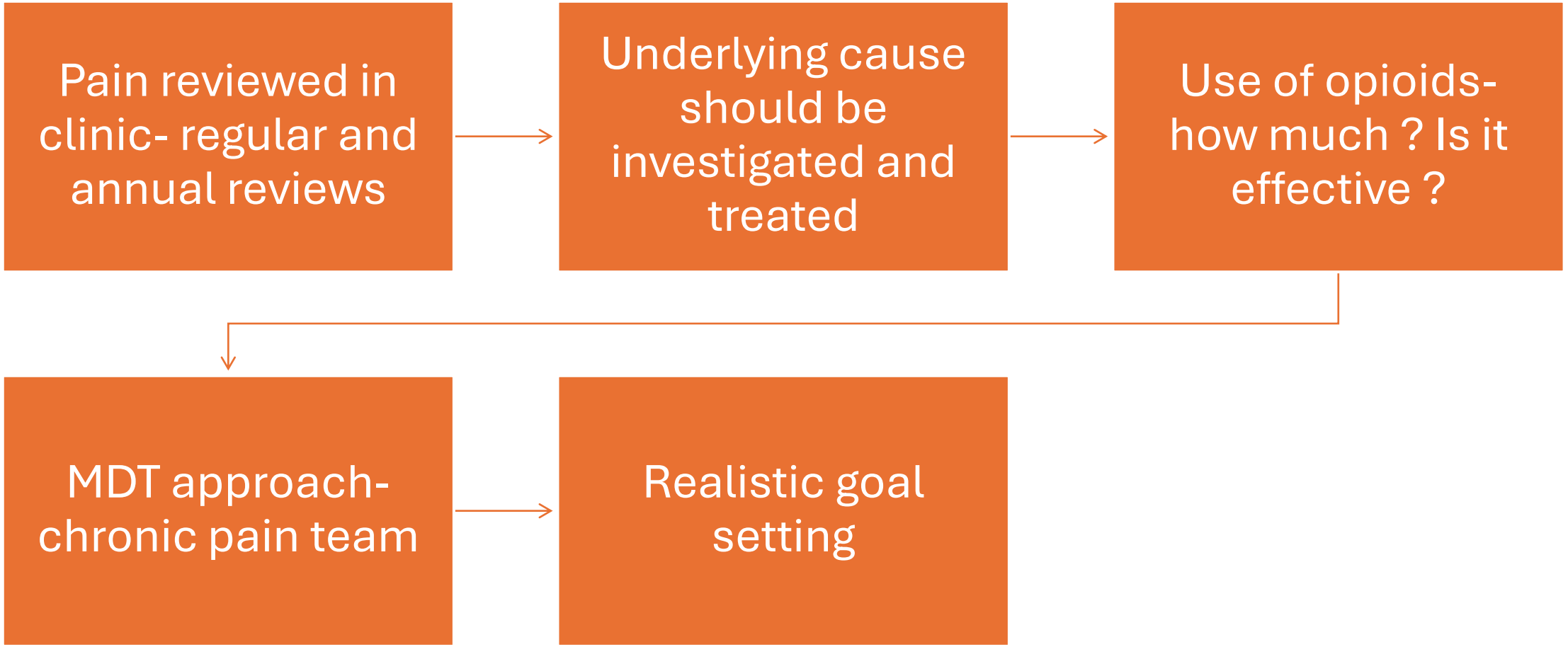
- Bone infarction – Avascular Necrosis of joints
- Pain
- Anxiety and depression
- Priapism
- Ophthalmology
- Gastrological
- Hepatic- iron overload, liver disease
- Renal- CKD
- Cardiovascular
- Respiratory
- Cognitive impairment
- Leg ulcers
- Organ failure
- Gallstones

(NICE 2021)

Sickle Cell Retinopathy - EyeWiki

Avascular Necrosis of Bones, ortho study- sarose.com.np

Treatment and management



Treatment and management cont....

- If no intervention needed at that time to encourage monitoring and safety netting advice for patients.
- Remember they are the experts !
- Frequency, site, duration and triggers should be closely monitored to enable better management and identify any exacerbating factors.

Pharmacological vs non- pharmacological

- **Pharmacological**
- Specific to patient
- Medication- analgesia, folic acid, penicillin v prophylaxis
- Individual care plans

- **Non- pharmacological**
  - Psychological support
  - Physiotherapy
  - Self-management strategies, education
  - Complementary therapies

Preventive

Hydroxycarbamide

Red cell exchanges

Blood transfusions

Regular reviews and encouraging patients to engage with investigations and interventions

Reference List

- SC Society. *Standards for the clinical care of adults with SCD in the UK* (2018) 2nd ed.
- Childerhouse, J E et al (2023). *Treating Chronic Pain in Sickle Cell Disease- The need for a biopsychosocial model.* The New England Journal of medicine.
- Natitional Institutue for Health and Care Excellence (NICE). *Sickle cell disease* : *What are the complications of sickle cell disease?*. Last revised in July 2021.

Thankyou