Overview of Sickle Cell Disease Clinical Guidelines

People with sickle cell disease (SCD) need proper treatment for the extreme pain they feel. In 2020, the American Society of Hematology (ASJH) released new guidelines on how to control acute and chronic pain in people with SCD. Several treatments are suggested based on the answers to the questions that follow.[1]

Questions to ask

These questions can guide treatment for pain caused by SCD:[1]

- Is the pain acute or chronic?
- What is causing the pain?
- Is the person a child or an adult?
- What is the person's treatment history?
- Where will the treatment be given (for example, emergency room or hospital)?
- What are the benefits and risks of each treatment for the person?

Acute pain in adults and children

Guidelines for acute pain in adults and children include:[1]

Standard protocol – Pain control in the first hour

Non-opioid drugs – Non-steroidal anti-inflammatory drugs (NSAIDs) for up to 7 days, ketamine infusion, regional anesthesia like an epidural or nerve block

Non-drug treatments – Guided audiovisual (AV) relaxation, massage, transcutaneous electrical nerve stimulation (TENS), virtual reality (VR), and yoga

Hospital care – Advanced care with experts in treating SCD pain

Chronic Pain

Guidelines for chronic pain include:[1,2]

Non-opioid drugs – NSAIDs, antidepressant drugs, and gabapentinoids (drugs that reduce nerve pain)

Chronic opioid therapy (COT) – Adults and children may continue COT if it is working for them

Non-drug treatments – Cognitive and behavioral pain management strategies in adults and children, acupuncture, and massage therapy in adults

This summary is based on the ASH 2020 guidelines for sickle cell disease: management of acute and chronic pain. The guidelines contain extra remarks for each recommendation. Due to limited data, suggestions have not been made on the following treatments:[1,2]

- For acute pain
  - Acupuncture
  - Biofeedback
  - Continuous IV opioid infusion
  - Corticosteroids
- For chronic pain
  - Exercise
  - Chronic transfusion therapy

References

1. Brandow AM, Carroll CP, Creary S, et al. American Society of Hematology 2020 guidelines for sickle cell disease: Management of acute and chronic pain. Blood Advances. 2020;4(12):2656-2701. doi:10.1182/bloodadvances.2020001851.

2. Bykov K, Bateman BT, Franklin JM, Vine SM, Patorno E. Association of gabapentinoids with the risk of opioid-related adverse events in surgical patients in the United States. JAMA Network Open. 2020;3(12). doi:10.1001/jamanetworkopen.2020.31647