**PO20 Management of pain in SCD - Challenges in Pregnancy**

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**INTRODUCTION**

The pathophysiology of Sickle cell disease (SCD) envolves severe inflamation, oxidative stress and endotelial dysfunction which contribute to a noxious microenvironment leading to acute and chronic pain. Mechanisms of pain in SCD suggests peripheral and central nervous system involvement. Painful crises are more common in pregnancy, leading to a higher risk of obstetrical and fetal complications, as well as medical complications. Opioids remain potent analgesics but other approaches are increasingly being explored.

**CASE PRESENTATION**

We hereby present a case of a 24 year old woman, 14 weeks pregnant, diagnosed with SCD (HbSS genotype). The patient was admitted in a terciary hospital due to a vaso-occlusive crisis with lower leg pain (tibial pain). Precipitating factors and potencial causes where not found and deep vein thrombosis was excluded. Despite the initial treatment with EV opioid analgesia and acetaminophen, there was no pain relief (VAS 6), and the patient was referred to our Acute Pain Unit, according to inter-hospital protocol.

After informed consent and providing standard basic anesthesia monitoring, the patient was placed in a supine position. An unilateral ultrasound guided sciatic nerve block was performed using 10 ml of 0.375% Ropivacaine, with catheter placement. The location was confirmed by visualization of hydrodissection with 0.9% NaCl. Following injection, the patient experienced tibial pain relief. A multimodal analgesic regimen incorporating acetaminophen and sulfate magnesium was performed. Follow up was made 3 and 6 days after the technique, with a clear improvement in pain (VAS 3) and quality of sleep. No infections signs were observed.

**DISCUSSION**

The management of acute pain in SCD is a major clinical challenge and requires a multidisciplinary care team, specially in pregnancy. Other approaches such as analgesia nerve blocks are particularly important in this population to avoid the complications of long term opioid use and provide multimodal analgesia. Future directions to treat pain are necessary, since pain causes a significant morbidity and negative impact in materno-fetal outcomes.

**REFERENCES**

Regional Anesthesia & Pain Medicine 2008;33:259-265.

Blood Advances.2020;4:12

**KEY WORDS**

**Pain management - Sickle Cell Disease - Pregnancy - Locoregional Analgesia - Multimodal analgesia**