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**Review article:**

**Study of surgical aspects of sickle cell disease - Pathophysiology with review of literature**

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**Abstract:**

**Objectives :** To study the surgical presentations of sickle cell anaemia (SCA) in a sickle cell belt in India and to discuss the historical aspects and pathophysiology of sickling and its sequelae.

**Methodology :** One hundred patients attending the surgical outpatient were screened for Sickle cell disease and the signs and symptoms were recorded as to the type of crisis they presented with.

**Results:** Out of a hundred patients included in this study ninety patients presented with SCA and ten with Sickle cell trait (SCT). 53% patients presented with vasoocclusive crisis. Leg ulcers and abscesses formed the next most common modes of presentation. Wound infection and delayed wound healing were the most commonly occuring complications.

**Conclusion:** Patients of Sickle cell anaemia presented mainly with vasoocclusive crisis requiring a proper evaluation and careful management of surgical procedures. Distinguishing between vasoocclusive crisis or surgical cause of abdominal pain is paramount to avoid unnecessary surgical procedures. Surgical patients require proper hydration, blood transfusion and proper oxygenation to avoid post operative complications. Use of minimal invasive surgical techniques wherever possible obviates complication rate. Proper genetic counseling of susceptible population is essential.

**Keywords:** Sickle cell disease, vasoocclusive crisis, abdominal pain, drepanocytosis