



## LETTER TO EDITOR

### ANAESTHESIA IN A CHILD WITH COMPLICATED SICKLE-CELL DISEASE, LETTER TO EDITOR, WITH COMPLICATED SICKLE CELL ANAEMIA

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#### ABSTRACT

Anesthetists should have to face with different challenging sickle cell anaemia cases due to the nature of the disease. Thorough understanding of the pathophysiology of sickle cell crisis and organs dysfunction accompanied sickle cell anaemia will result in a decrease in perioperative morbidity and mortality. Also, proper preoperative assessment and evaluation with a multi-disciplinary team approach will carry out good optimization enabling early detection and management of perioperative complications.

## INTRODUCTION

Bala et al. 2016 had discussed and reported the anaesthetic challenges in a very interesting case, having a complicated sickle cell disease. A combined plan of management was carried out as the patient had a cardiac problem as well as recent history of splenic sequestration crisis. (Bala *et al.*, 2016) I would like to share my experience and emphasize the importance when dealing with such patients as often anesthetists should have to face with different challenging sickle cell anaemia cases due to the nature of the disease and multi-systems affection pattern. Proper preoperative assessment and evaluation with a multi-disciplinary team approach will carry out good optimization enabling early detection and management of perioperative complications. (Ejaimi, 2016) Monitoring of body temperature is of high importance in patients having sickle cell anaemia. Another measure which was done was their collaboration with the surgical team in regards to the use of a low intra-abdominal pressure of 8 – 10 mmHg technique. Consequences of this are less jeopardized intraoperative venous return and a decrease in the incidence of postoperative lung collapse and atelectasis. (Gutt *et al.*, 2004) However, I would like to share a few thoughts which I think the authors should had emphasized on them. Even with normal preoperative investigations, an idea about the baseline haemoglobin, haematocrit and haemoglobin S level beside the

history of blood transfusion and exchange transfusion would help especially in this case the patient had experienced splenic sequestration a month prior to surgery. The duration of surgery and operation should be mentioned. Postoperative analgesia in sickle-cell anemia plays a significant role in decreasing the incidence of sickling crisis and makes the patient able to tolerate early mobilization and chest physiotherapy, hence reducing pulmonary complications. Analgesia itself is challenging in these patients. (Ingle and Ubale, 2011; Sandoval *et al.*, 2002) Authors, managed this aspect with paracetamol infusion 500 mg/8h plus 30 micrograms of fentanyl as rescue analgesia following Visual Analogue Scale for pain (VAS) if exceeded 3. However, they did not tell about the total doses and intervals of fentanyl. They should specify what the precautionary measures that had been taken to guard against hypoxia in a case of the use of short intervals multiple doses?

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