**“Retrograde Intra Renal Surgery (RIRS): Minimally invasive Stone surgery, its safety and efficacy in patient with Sickle Cell Anaemia. A case report and review of literature for the optimal peri-operative management of Sickle cell patients.”**

**ABSTRACT:**

Sickle Cell Anaemia is a genetic haematological disorder, characterised by repeated haemolytic and vaso-occlusive episodes. Kidney stones are common in India. The optimal management depends on stone related factors (stone burden, location, hardness, degree of hydronephrosis) and patient related factors. Surgery in patients with bleeding disorders can be challenging. Among various modalities, Retrograde Intra Renal Surgery (RIRS) is the most minimally invasive modality for upper tract calculi due to the least risk of bleeding. Our patient presented with 13 x 12 mm upper ureteric calculus with hydronephrosis. During pre-operative work up, he was diagnosed with Sickle Cell Anaemia. With RIRS, complete stone clearance was achieved. No post-operative complication such as bleeding, urosepsis, sickling crisis, renal infarction was noted. Till date, there is no reported case of RIRS for stone in Sickle Cell Anaemia patients. We aim to report this case and review the literature for the ideal peri-operative management.