

Splenic-sequestration Crisis

Clogged-spleen Crying

This is an emergency due to Intra-splenic trapping of RBCs leading to a drop in hemoglobin with appropriate reticulocytosis and painful enlargement of the spleen. This can result in hypovolemic shock.

Hyper-hemolytic Syndrome

Hiker with Hemolysing RBCs

This is an emergency where there is a drop in hemoglobin with appropriate reticulocytosis and no painful enlargement of the spleen. It occurs due to accelerated RBCs breakdown.

Renal Papillary Necrosis

Kidney Paper Necrosis-crow

Vaso-occlusion in the renal papillae results in its necrosis and sloughing off. Patients experience acute colicky flank pain, gross hematuria and passage of tissue fragments in urine.

Salmonella osteomyelitis

Salmon Skeleton-in-flames

Due to splenic dysfunction and subsequent auto-splenectomy, patients have increased susceptibility to encapsulated bacteria. Studies have demonstrated that patients suffering from sickle cell disease are more likely to have osteomyelitis due to the encapsulated bacteria Salmonella than other common causes such as S. Aureus.

Pulmonary Hypertension

Lungs Hiker-BP

Vaso-occlusion of pulmonary vessels results in hypoxia and subsequent vasoconstriction (hypoxic pulmonary vasoconstriction) in order to redirect blood flow to alveoli with higher oxygen content.

Hyposthenuria

Hippo-pasta-urinal

It is thought that sickling in the vasa recta of the kidneys impairs countercurrent exchange and free water reabsorption resulting in excessive urination.