



Spontaneous Splenic Rupture Complicating Severe *P. falciparum* Infection: A Case Report and Literature Review

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Abstract:

Malaria is a parasitic life-threatening endemic disease in over 100 tropics and subtropics [1]. Malarial splenic rupture (MSR) is a rare but potentially fatal complication of severe malarial infection and hence it deserves special attention [2]. The estimated incidence of MSR is 2% in acute malarial infections; however, the exact incidence is largely unknown due to the substantial under-reporting [2]. We report on a 32-year-old Sudanese male who was a resident from Plasmodium falciparum malaria-endemic area, who was diagnosed with severe *P. falciparum* infection as per WHO criteria [3] when he presented with an acute abdomen and hypovolemic shock due to spontaneous splenic rupture following five days of onset of characteristic febrile pattern of Plasmodium falciparum. A combination of three principal factors, which ultimately result in a sub-capsular haematoma formation, is thought to be implicated in pathogenesis of MSR. These factors are (I) cellular hyperplasia and venous-sinusoidal congestion leading to increased tension and stress on the capsule, (II) vascular occlusion of the reticuloendothelial cells resulting in thrombotic or ischemic events, and (III) episodic increase in intra-abdominal pressure accompanying coughing, sneezing, and laughing which add more stress on the diseased and friable spleen [2, 4]. In the modern surgical practice era, a non-operative management can be safely followed for haemodynamically stable patients and splenectomy is indicated for haemodynamically unstable patients with ongoing shock as a critical life-saving surgery [2].

Biography:

Dr. Eltaib Saad is a junior surgical trainee in the Republic



of Sudan who is currently doing a 2- year basic surgical training scholarship in the Republic of Ireland. He holds an MBBS degree from the University of Khartoum with an outstanding undergraduate record.

Recent Publications:

1. Eltaib Saad, et al; Spontaneous Splenic Rupture Complicating Severe *P. falciparum* Infection: A Case Report and Literature Review; 2019
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