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A Case of Cerebral Malaria

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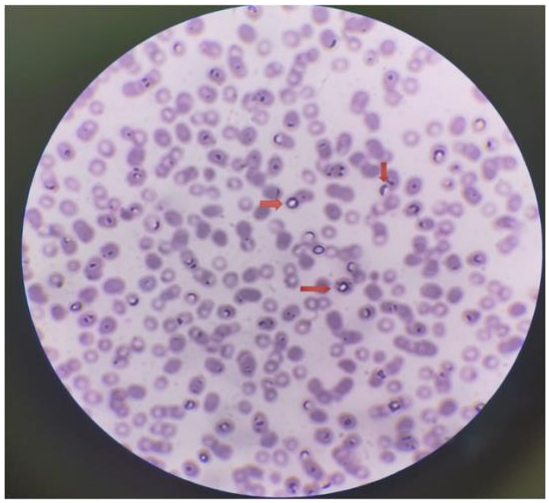

Figure 1: Blood peripheral smear of ring and gametocyte forms of *P. falciparum*.

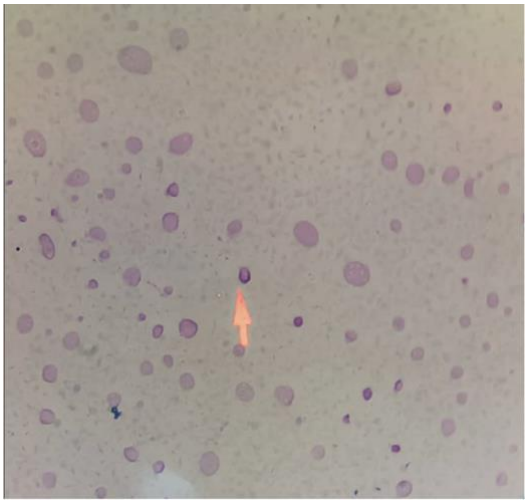

Figure 2: CSF peripheral smear of ring form of *P. falciparum*.

Clinical Image

Abstract: Fever attacks and neurologic findings may be observed in cerebral malaria (CM) [1,2]. However, there has been no effective treatment yet [3].

Clinical Presentation: A 30-year-old male, living in a rural area, had a history of fever for nearly 10 days. He underwent a thick-drop peripheral smear for suspected malaria at a healthcare institution close to his residence and was diagnosed with *P. falciparum*. Artesunate intravenous (IV) treatment was initiated. The patient was referred to our center due to confusion after receiving four doses of treatment. The patient had high fever. Time and space orientation was lost. He had urinary and fecal incontinence, and nuchal rigidity was observed. Kernig and Brudzinski tests were also found to be positive.

Computed tomography of the brain revealed no pathology. Cerebrospinal fluid (CSF) examination revealed glucose: 14mg/dL (concurrent blood glucose: 84mg/dL), protein: 1440mg/dL and chlorine: 90mg/dL. Parasites were observed in thick drop peripheral smear of CSF and blood. Gram stain was negative for bacteria. Hespes simplex virus, varicella zoster virus, cytomegalovirus, Epstein-Barr virus IgG and IgM were negative. The patient diagnosed with CM was treated with artesunate 180mg loading dose and 120mg maintenance dose (total 3x1) + quinine iv 650mg 3x1 for seven days.

Discussion: We face with a severe case of cerebral malaria with a mortal course without complication such as metabolic acidosis or multiple organ failure. Unlike the literature, we aimed to present an interesting case with no upper motor neuron findings and a mortal course despite treatment.

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