



# A Case of Falciparum Malaria Complicated By Patient Negligence

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## INTRODUCTION

Among the developing countries, Malaria is one of the major public health problem with high rates of mortality and morbidity.<sup>1</sup> One of the most common cause of death in malaria is caused due to infection by Plasmodium falciparum species.<sup>2</sup> Neurological complications are most commonly associated with Plasmodium falciparum infection which may manifest as seizures, impaired consciousness, coma and agitation.<sup>3</sup>

## CASE REPORT

A 24 year old, male presented to our Rural Health and training center with symptoms of fever associated with chills, rigor, myalgia for the past one day. Axillary temperature was recorded which showed 102<sup>o</sup> Fahrenheit. The patient had no symptoms of cough, burning micturition, diarrhea, abdominal pain and sore throat. On general examination, the patient had boils with pus over his arms. The patient was started on amoxicillin with clavulanic acid and anti-pyretic drugs, and was sent home. The same patient presented on the third day with the same complaints. His parents were advised to take blood test for which they refused and went against medical advice. They returned again on the 6<sup>th</sup> day of fever with the patient presenting with symptoms of agitation, altered sensorium, high fever and shortness of breath. When the parents were questioned, they replied that he had these symptoms, which progressively worsened over the course of 2 days. The parents thought that his son was possessed and took him to nearby spiritual healer which showed no improvement. Blood investigations were done and he was tested positive for

malaria with thick and thin blood film tests which showed falciparum malaria. He had hemoglobin of 8 mg/dl, Total White blood cell count of 3200 cells/cu.mm, platelet count of 60,000 and raised ESR of 150/230. Peripheral smear showed normocytic normochromic anemia. He was tested negative for Typhoid and urinary tract infection. Suspecting cerebral malaria with dengue co-infection, the patient was immediately shifted to a tertiary care hospital and was followed up. When the patient reached the hospital, he was unconscious with Glasgow Coma Scale of 10 a blood pressure of 56/40 mm Hg. He was immediately admitted in Intensive Care Unit and was started on noradrenaline infusion. Serology testing was done for dengue which turned out to be negative. Supportive treatment was provided. Intravenous Artesunate injection was started with close monitoring on his renal functions. During the course of stay in the hospital, the patient had 3 episodes of tonic-clonic seizure, for which, he was treated with midazolam. The patient was shifted to general ward after his seizures got reduced and gained full consciousness. Intravenous antibiotics were continued for one week and patient was discharged in two weeks after he made a full microbiologic and clinical recovery.

## DISCUSSION

In medical practice in India, negligence is one common term we see in every other day in news or media. News like patient's relatives trashing doctors has become a headline among news channels. But patient negligence is seldom reported anywhere. If the blood investigations were done on the 3<sup>rd</sup> day of fe-

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ver, he would have been diagnosed as having falciparum malaria and he would have made a full recovery without any central nervous system complications. It has become a common practice among people of rural India to go their respective religion's spiritual healer for treating any symptoms like delirium, acute psychosis, altered sensorium or confused state. It will only make the problems worse for the patient.

Cerebral malaria is responsible for most of the mortality associated with malaria fever.<sup>4</sup> Again people usually think that malaria is not a fatal disease and we get trashed either verbally or physically if we say that it is cerebral malaria and we advise them for a CT or an MRI scan. Without any treatment, Cerebral malaria is invariably fatal.<sup>5</sup> Impaired consciousness progressing to coma is one the most severe manifestation of cerebral malaria.<sup>6</sup> It is caused by parasitized red blood cells sequestered in cerebral micro-circulation. Prognosis is far worse among children.

## CONCLUSION

Health education among people living in rural and malaria endemic areas is necessary, so that they can know when to seek medical advice, and also medication adherence and proper follow up is necessary. Each person living in rural India must know at least some, if not all the endemic diseases in his/her area. This has to be done by our government associated national programs attached with various diseases like malaria, tuberculosis etc.

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