



## A Case Report on Malaria

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### Authors' contributions

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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Case study

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## ABSTRACT

**Introduction:** Malaria is caused by the parasitic protozoan Plasmodium. It is a vector-borne disease which is transmitted from person to person via bites from infected mosquitoes. Following a mosquito bite the parasites multiply in the liver and subsequently infect red blood cells. It is a mosquito-borne illness. Fever or flu symptoms include shivering chills, headaches, and muscle pains. Anemia, jaundice, nausea, and diarrhea are some of the symptoms of malaria.

**Main Symptoms and Important Clinical Findings:** A 24-year-old woman was admitted in Acharya vinoba bhav rural hospital with chief complaint of stomach pain as her primary complaint. Then after several days Fever, pain, fatigue, headache occur. Several diagnostic evaluations done which shows total Red blood cells count: 4.8 million cu mm; white cell count: 11.810 cells mm<sup>3</sup>; lymphocytes: 11.2% platelets drop on smear, RBCs are moderated.

**The Main Diagnoses, Therapeutic Interventions, and Outcomes:** 24 years old women admitted in Acharya vinoba bhav rural hospital with the chief complaint of stomach pain, fever, fatigue, headache and after all investigation she has diagnosed as malaria. Doctor manage with Iv fluids, cap. Doxycycline 100 mg, tab.dolo 650 mg, tab.larigo 650 mg, emset 4 mg injection Once a day, she was also given the Calcium Tab. Her condition has improved as a result of the treatment. The fever and agony had subsided.

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**Conclusion:** My patient was admitted to Acharya vinoba bhav rural hospital with a known case of malaria and a fever and discomfort complaint. Her condition improved after she received proper therapy.

*Keywords: Malaria; larigo; anemia; plasmodium.*

## 1. INTRODUCTION

It is a mosquito-borne illness that spreads by mosquito bites [1] from one person to the next. The parasites proliferate in the liver after a mosquito bite and then infect red blood cells. Every year, one million people are killed by malaria, the bulk of them are under the age of five years old. Plasmodium falciparum, a microscopic parasite, is the organism that causes the most fatal type of malaria [2]. Only female mosquitoes transmit this parasite, which is disseminated by mosquito species belonging to the Anopheles genus [3]. Using mosquito bed nets sprayed with long-lasting insecticides to limit mosquito bites and kill mosquitoes, as well as treating the region with pesticides, are the most effective mosquito prevention strategies [4]. To kill malaria-carrying mosquitoes, spray similar inside the walls of dwellings [5]. The World Malaria Report 2008 from the World Health Organization examines Malaria infections are on the rise, and deaths in affected countries from 2001 to 2006, and looks at whether WHO recommendations are being followed [6].

## 2. PATIENT INFORMATION

### 2.1 Patient Specific Information

A 24-year-old woman was admitted to Acharya vinoba bhav rural hospital with stomach pain as her primary complaint. The doctor identified a case after a physical examination and research.

### 2.2 Present Medical History

Patient having present complaint of abdominal pain, fever, trembling chills, headache, and muscle tension. Malaria has been diagnosed by physician. At the time of admission, the platelet count is lower than 150,000 m m<sup>3</sup>. She is tired and weak.

### 2.3 Past Medical History

Patient has not past medical history.

### 2.4 Family History

The family consists of four members. Non-consanguineous marriage is a type of parent

marriage. Except for my patient, who was admitted to the hospital, the rest of the family had no issues.

### 2.5 Clinical Manifestation

The typical paroxysmal attack of malarial fever is Cold, heated, and sweating stages are split into three categories (a febrile period). Laziness, headache, nausea, anorexia, limb soreness, and a chilly sensation are common symptoms of the cold stage, which are rapidly followed by stiffness. The body temperature immediately rises to 39 to 41 degrees Celsius with severe headache, vomiting, restlessness, weakness, and a fast pulse. In the hot stage, patients become overheated and remove their garments. The skin is flushed, dry, and scorching. With a full pulse and quick breathing, the headache becomes more painful. The heart rate has slowed. The patient is relieved and falls asleep soon after. This stage can last anywhere from 2 to 4 hours.

### 2.6 Medical Management

The specific treatment consists of antimalarial drug, with the recommended drug regimen by national antimalarial program. The drug regimen mentioned specific treatment schedule for high-risk areas, low risk areas and for severe and complicated malaria. Patient given specific drug are chloroquine and doxycycline. Inj. Pan, Inj.emset, inj.avil and antibiotic drug should give to patient. Doxycycline 100mg, tab. dolo 650mg, tab. larigo 650mg, and inj. emset 4mg are also available. She was also given the Calcium Tab. once a day.

### 2.7 Symptomatic Management

It should be done with antipyretic and adequate fluid therapy, orally or with IV fluid. Anticonvulsive drugs and steroids may be needed. Blood transfusion may be required in severe anemia. Good nursing care should be provided with rest, skin care, and tepid sponge, increasing fluid intake, balanced diet and hygienic measure. Emotional support and involvement of the parents with necessary instrument are important aspects of care.

## 2.8 Nursing Management

- 1) Make certain that the nursing care is precise. This can save a patient's life, especially if they are unconscious. Keep your airway open.
- 2) To avoid fluid aspiration, place the patient in a lateral or semi-prone position.
- 3) The stomach contents are evacuated via an NG tube to reduce the risk of aspiration pneumonia.
- 4) Keep track of your intake and outflow. In order to ascertain the approximate weight of the patient, weigh him or her every day.

## 2.9 Past intervention and Outcome

My patient diagnosed with malaria, present case had no history of similar attack, no history of hypertension, diabetes, or tuberculosis. Treatment and improvement were still ongoing on my last day of care.

## 2.10 Clinical Finding

The patient was awake and oriented of the date, time, and location. Her general condition was average, and she kept up with her personal cleanliness. In the context of a P. falciparum positive blood smear, she had a fever [axillaries temperature 38.5°C], chills, severe malaise, headache, or vomiting) at the time of assessment of 1–2 days before the examination.

## 2.11 Physical Examination

In a head to toe examination, patient having difficulty for walking and doing activity also patient feel fear and anxiety and appear skin rashes in body. She is frail and uncooperative.

## 2.12 Diagnostic Assessment

Based on her medical history, physical examination, belly palpation. The fasting blood sugar levels were abnormally high. There were no issues during the diagnostic exam. She undergone all investigation and her White blood cell count are decreased rapidly.

## 3. DISCUSSION

The patient was admitted to the hospital with stomach pain as the primary complaint. Following a medical check and inquiry, the doctor determined that she had malaria. The most successful malaria treatment is a combination of

anti-malarial medications, one of which is an artemisinin derivative [7]. Antimalarial medications can also be used to prevent malaria in pregnant women. Malaria has a decreased probability of causing harm to both the mother and the fetus. Several multinational organizations have set lofty goals for malaria control around the world [8]. It assesses how far the sickness has progressed, as well as the funding sources, and assesses the effectiveness of malaria control programs [9] In India, malaria has been a severe problem health trouble affecting mainly the north-eastern states, because the geography and weather condition of these areas favor the prevalence of malaria parasites such as Anopheles minimus, Anopheles virus, Anopheles fluviatilis and plasmodium falciparum. In 1976, there were total 6.74 million reported case of malaria, which decreased to 2.1 million in 1984 after the implantation of a modified plan of operation. There were total 0.98 million cases of malaria in the nation, out of which 0.46 were Falciparum cases in 2001 [10].

## 4. CONCLUSION

The plasmodium parasite, which is carried by mosquito bites, causes the disease. Depending on the plasmodium species, the severity of malaria varies. It helps to improve the state of the patient if we provide proper care with diverse multidisciplinary health teams and their supportive management. Patient is awake and alert, and her condition has improved.

## CONSENT

As per international standard or university standard, patient's consent has been collected and preserved by the authors.

## ETHICAL APPROVAL

Ethical clearance taken from institutional ethics commits.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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