Pancytopenia is characterized by decreased numbers of all cell lines. Aplastic anemia is a common cause although malarial infection causing lysis of RBCs may also partly mimic this condition. The infection may also damage the patient's bone marrow resulting in pancytopenia as well. We present the case of a post-partum female patient who reported with fever, body aches and shortness of breath one month after the delivery of her baby. All blood cell counts were decreased and peripheral blood smear showed malarial parasites. Anti-malarial treatment was initiated following which the fever subsided but, despite regular transfusions, the blood counts remained low. Bone marrow biopsy report revealed *P. falciparum* pigments along with hypocellularity characteristic of severe aplastic anemia. Consequently, bone marrow transplantation was advised as a therapeutic measure. This case report highlights the increased susceptibility of pregnant women to malaria in endemic areas and subsequent aplastic anemia.


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ml of 10% dextrose given over 4 hours) followed by quinine salt (600 mg every 8 hours). Doxycycline (200 mg once daily), injection venofer, injection methyl prednisolone sodium succinate and injection filgen were also administered.

Her fever subsided but her blood counts remained low and underwent daily RCC transfusions. A week later, she developed spontaneous vaginal bleeding. She was administered platelets to stop the bleeding but it recurred 3 days later. On failing to maintain blood counts, she was advised bone marrow biopsy which revealed hypocellularity with depression of erythropoiesis, myelopoiesis and megakaryopoiesis. *P. falciparum* pigments were also detected. A diagnosis of severe aplastic anemia was made by the consultant haematologist and bone marrow transplant from one of the siblings was advised as treatment. Thirteen pints of RCC were administered to the patient during her hospital stay. She was transferred to Armed Forces Bone Marrow Transplant Centre (AFBMTC) for pre-transplant assessment.

**DISCUSSION**

Pancytopenia is a common haematological disease in our setup. In children, the most common cause is attributed to aplastic anemia. Malaria may also result in the former disorder. Pallor, fever, petechial haemorrhages, organomegaly and internal bleeding are the most frequently encountered presenting complaints in this disorder. Pregnant females are more prone to acquiring malarial infections as determined by molecular regulatory changes that allow greater adherence of the protozoa to the RBCs. This may occur despite adequate immunity against the infection. Such malarial infections have been known to cause anemia by various mechanisms including suppression of erythropoiesis by direct invasion of the bone marrow and destruction of pleuri-potent stem cells, immune hemolysis of RBCs and as a consequence of disseminated intravascular coagulation (DIC). This patient presented with clinical features that were suggestive of malarial infection. CBC revealed pancytopenia and peripheral blood smear showed malarial gametocytes. However, despite adequate treatment, the condition of the patient did not improve and daily blood transfusions had to be continued due to failure of maintenance of blood counts. Bone marrow biopsy revealed hypocellularity and severe aplastic anemia was diagnosed by the consultant haematologist. The fact that the patient was asymptomatic before and the problems starting after the fever point to the infective etiology of the aplastic anemia. This case report thereby highlights the importance of diagnosis and adequate management and even prophylaxis of malaria in postpartum females in malaria endemic areas. This is important since pancytopenia due to malarial infections may be easily managed but that occurring as a result of aplastic anemia is very difficult to treat, carrying a high mortality rate. The most effective treatment in the latter is bone marrow transplantation from a compatible sibling carrying a success rate of 56 – 89%.

This case report, therefore, stresses the importance of possible administration of anti-malarial prophylaxis in selected postpartum female patients living in malaria endemic areas that have been transfused with blood during the process of labour. This is to prevent the occurrence of aplastic anemia as a result of such infection, the only adequate treatment being bone marrow transplantation in the former condition.

**REFERENCES**