Case report

A depiction of imported malaria in Connecticut

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In 2010, there were roughly 219 million cases of malaria reported worldwide resulting in an estimated 660,600 deaths [1]. In contrast, the total number of cases according to the Centers for Disease Control and Prevention (CDC) in the United States (USA) was only 1691 [2]. Of those, 1688 were cases of imported malaria [2]. This is the highest number of cases reported in U.S. since 1980 [2]. Here, we describe a case of imported malaria and conduct a retrospective case series at four Connecticut (CT) hospitals in order to describe the demographics of imported malaria and to identify potential barriers to timely diagnosis and treatment.

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Introduction

In 2010, there were roughly 219 million cases of malaria reported worldwide resulting in an estimated 660,600 deaths [1]. In contrast, the total number of cases according to the Centers for Disease Control and Prevention (CDC) in the United States (USA) was only 1691 [2]. Of those, 1688 were cases of imported malaria [2]. This is the highest number of cases reported in U.S. since 1980 [2]. Here, we describe a case of imported malaria and conduct a retrospective case series at four Connecticut (CT) hospitals in order to describe the demographics of imported malaria and to identify potential barriers to timely diagnosis and treatment.

Case report

A 24-year-old African-American female college student with no significant past medical history presented to the emergency room with fever, lower abdominal pain and nausea without vomiting starting the day prior to admission. She noted that her menstrual period was slightly late, but otherwise the history obtained was non-contributory.

In the ED, she was found to be febrile (102 F) and tachycardic. She had an episode of vaginal bleeding while being evaluated. As a result, a pelvic examination was performed, which was unremarkable aside from scant blood in the vaginal canal and a closed cervix. Beta-HCG was obtained and was elevated at 784. Ultrasound of the abdomen and pelvis demonstrated a fetal sac in the uterus, but was otherwise within normal limits. Routine diagnostic testing was notable for a normal white blood count, normal hemoglobin, low platelets (92,000), normal kidney function (Cr 0.6), mild transaminitis (ALT 84, AST 72) and an indirect hyperbilirubinemia (TB 1.4, DB 0.3). Urinalysis demonstrated 5–6 WBCs, 9–10 RBCs, 10–12 epithelial cells, 1+ bacteria and trace leukocytes.

She was subsequently admitted to the medical service with the diagnosis of UTI and threatened abortion and was started on nitrofurantoin and IV fluids. Overnight, she spiked a high fever (104 F) with rigors. Morning laboratory investigations revealed a new leukopenia (WBC 2.8) and worsening thrombocytopenia (Plt 66,000). As a result, OB/Gyn was consulted for concern for possible septic abortion. They determined that it was an inevitable abortion and antibiotics were broadened. Given her worsening septic picture, infectious disease was consulted, a peripheral blood smear sent and doxycycline started for concern of ehrlichiosis. During the infectious disease evaluation, it is discovered that both the patient and her husband had recently traveled to Nigeria, her husband had been infected with malaria during their visit there, and she herself