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Images in Infectious Diseases

Falciparum Malaria-Induced Splenic Infarction

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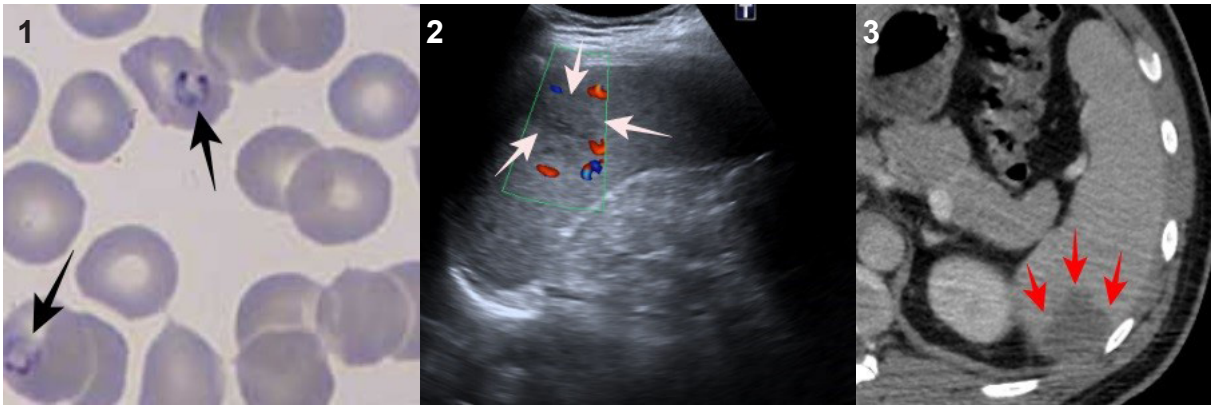

FIGURE 1: Appearance of banana-shaped *Plasmodium falciparum* gametocytes in erythrocytes on peripheral smear (black arrows).

FIGURE 2: Ultrasonography showing a patchy hypoechoic area in the spleen (white arrows).

FIGURE 3: Venous phase contrast-enhanced computed tomography showing the infarct area in the spleen (red arrows).

On the final day of a 3-day oral artemether-lumefantrine combined malaria treatment, a 30-year-old man in the infectious diseases ward began experiencing pain in the left hypochondriac region. A peripheral smear examination revealed the presence of banana-shaped *Plasmodium falciparum* gametocytes within erythrocytes (**Figure 1**). Additionally, a rapid diagnostic immunoassay confirmed the presence of *P. falciparum* antigen in the patient's blood. Abdominal ultrasonography identified a patchy hypoechoic lesion in the spleen (**Figure 2**), which was later confirmed as an infarct area through venous phase contrast-enhanced abdominal computed tomography (**Figure 3**). Observations also included splenomegaly, with a vertical length of 146 mm, and an increased splenic vein diameter of 11 mm. These findings were attributed to a splenic infarction caused by malaria. Malaria can lead to various splenic complications, including splenic infarction, spontaneous splenic rupture, hyperreactive malarial syndrome, hypersplenism, ectopic spleen and splenic torsion, and splenic cysts[1]. Splenic infarction, although not commonly observed, is likely underdiagnosed in many instances of complicated malaria[2,3]. Despite its rarity, splenic infarction should be considered as a potential complication in patients experiencing left quadrant pain during malaria treatment.

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