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## Clinical image

# Purpura fulminans: an unusual complication of malaria

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A 45-year-old male presented with history of fever for four days and a skin rash for two days. The rash was present primarily at the extremities and had progressed to acquire a blackish hue at the time of presentation (Figs. 1 and 2). The patient was febrile and had hepatosplenomegaly. On further workup, the patient was diagnosed to have *Plasmodium falciparum* malaria on peripheral smear and antigen testing. The fever responded to intravenous artesunate and oral doxycycline. The patient

lost his second and fourth toes of the right lower limb.

Purpura fulminans is a cutaneous manifestation of disseminated intravascular coagulation.<sup>1</sup> It most commonly is a result of sepsis related to meningococcal, streptococcal or other bacterial infection. On occasion, it has been reported with malaria or deficiencies of anticoagulants like protein C or S. The management includes treatment of underlying disease and the use of activated protein C.<sup>1,2</sup> Cutaneous



Fig. 1 – Purpuric rash on hands.



Fig. 2 – Skin rash and gangrenous changes in lower limb.

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manifestations are unusual with malaria and purpura fulminans has been reported only occasionally with malaria.<sup>3,4</sup>

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**Conflicts of interest**

The authors declare no conflicts of interest.

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