



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## SKIN MANIFESTATIONS: A PIVOTAL ROLE IN DIAGNOSIS OF RICKETTSIOSES

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**Background:** Cutaneous manifestations of rickettsioses play a key role in clinical diagnosis of rickettsioses. Serology and molecular biology are of interest to confirm the infection.

**Objective:** Elucidate cutaneous findings in rickettsioses and their usefulness in the diagnosis of the disease.

**Materials and methods:** A prospective study (2012-2014) was conducted in the Infectious diseases department, Hedi Chaker University Hospital of Sfax, including patients with acute eruptive fever or acute febrile illness without eruption, who have been diagnosed with rickettsioses. Confirmation of rickettsioses was based on serology and /or molecular method.

**Results:** Among 115 patients with acute eruptive fever or acute febrile illness without eruption, 60 cases of rickettsioses (52,2%) were included. The diagnosis of spotted fever group rickettsioses was retained in 34 cases (56,7%), typhus group: 18 cases (30%) and rickettsioses without group identification: 8 cases (13,3%). Forty-nine patients (82%) (94,1% of spotted fever group cases and 66,6% of typhus group cases) had a maculopapular rash. Inoculation eschar at the tick bite site was found in 14 cases (23%). One patient presented with two eschars. A complicated form with a digital necrosis was reported in one case. The diagnosis was confirmed by serology in 53 cases (88,3%). Real time PCR, performed for 23 patients, on collected skin biopsies (from eruption or from the eschar) or swabs, was positive in 21 cases and permit the diagnosis in 7 cases where serology was negative.

**Conclusions:** The maculopapular rash has a pivotal role in suspecting the diagnosis of rickettsioses, especially when it is associated with an inoculation eschar. However, in cases without or with atypical eruption, the diagnosis is difficult to establish. So, serology and/or PCR on skin biopsies are mandatory to confirm the diagnosis.

