

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Internal Medicine Quiz – Case 8

A 61-year-old man presented to the Emergency Department with a 10-day history of fever, malaise, dry cough and severe myalgias. He had been examined by his general practitioner and received cefprozil for five days without improvement. He was a retired school teacher and lived as a farmer in a rural village of Crete, where he owned two sheep. His previous medical history was unremarkable. Physical examination revealed a blood pressure of 100/60 mmHg, temperature 39 °C, pulse oxymetry 92% and relative bradycardia (80 bpm). A maculopapular exanthema was noted on trunk and extremities including the palms and soles (fig. 1). Laboratory examination disclosed: Ht 41.4%, hemoglobin 14.8 g/dL, RBC 5.16 M/ μ L, reticulocytes 1.9% (absolute number 92.880/ μ L), white cell count 7.060/ μ L (83% neutrophils, 10% lymphocytes, 7% monocytes), platelets 90.000/ μ L, AST 93 IU/L (10–40 IU/L), ALT 62 IU/L (10–35 IU/L), Na 131 mmol/L, serum creatinine 2.8 mg/dL (0.7–1.3 mg/dL), CPK 877 IU/L (38–174 IU/L), LDH 466 IU/L (100–180 IU/L) and CRP 19.49 mg/dL (<0.5 mg/dL). Coagulation screen demonstrated evidence of disseminated intravascular coagulation: PT 16 sec, INR 1.51, aPTT 46 sec, fibrinogen 110 mg/dL (200–400 mg/dL), D-dimers 1.400 μ g/dL (50–230 μ g/dL). Careful inspection revealed a tick parasitizing on the patient's left lower abdomen (fig. 2). The tick was carefully removed (fig. 3) and treatment with doxycycline was commenced. An entomologist identified the tick as a *Hyalomma marginatum* (family Ixodidae). The diagnosis of infection was confirmed serologically.

Comment

Hyalomma species are widespread and commonly infest domestic animals (sheep, cattle) and occasionally humans. Many investigators have reported the isolation of rickettsial strains from these ticks. This patient had no dogs but admitted that he had removed similar ticks from his sheep. The patient responded rapidly to doxycycline. At discharge, 7 days later, the exanthema had almost disappeared leaving a 12 mm eschar at the tick bite site (tâche noire). Serum samples were taken from the patient on days 2, 10 and 21 after admission. The first two samples were negative for anti-rickettsial antibodies by immunofluorescence, but in the third sample high titers of antibodies against *Rickettsia conorii* were detected (IgM=1/3200, IgG=1/960, IgA=1/400).

Corresponding author:

K. Liapis, First Department of Internal Medicine, "Venizeleion" Hospital, Heraklion, Crete, Greece
e-mail: kosliapis@hotmail.com

ARCHIVES OF HELLENIC MEDICINE 2008, 25(4):546
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2008, 25(4):546

K. Liapis,
E. Charitaki,
N. Lathourakis,
N. Papanikolaou

First Department of Internal Medicine,
"Venizeleion" Hospital, Heraklion, Crete,
Greece



Figure 1



Figure 2



Figure 3