



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

DERMATOLOGICAL MANIFESTATIONS OF ENTEROVIRUS INFECTION: CLINICAL PRESENTATION AND POSSIBLE LONG TERM SEQUELAE IN ADULT PATIENTS

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Introduction: Enteroviruses, including Coxsackieviruses, can cause the hand-foot-mouth disease (HFMD) or atypical exanthems associated with fever and, rarely, with more severe manifestations.

Objective: to prospectively study the clinical and virological features of patients with dermatological signs suggesting an Enterovirus infection.

Material and Methods: patients with dermatological signs suggesting an Enterovirus infections that have been visited in our Dermatologic department were recruited between November 2014 and March 2016. At onset, clinical data and pictures of the skin/mucosal lesions were acquired. To confirm the clinical diagnosis, blood samples for serology and polymerase chain reaction (PCR) for Enteroviruses RNA, followed by genotyping through a next generation sequencing panel (Laboratory of clinical microbiology, Insubria University, Varese) were collected. The confirmed cases were followed-up for two years to assess the possible long-term consequences of the infection.

Results: of the 14 recruited patients, 10 (6 man and 4 women, aged 18-56 years) had Enterovirus RNA in their serum, all genotyped as Coxsackievirus-A6. The clinical diagnosis were typical/atypical HFMD in 6 cases and atypical exanthems in 4 cases, often associated with systemic symptoms as arthromyalgias, malaise and fever. On average, clinical resolution took place in 12 days. Seven patients were followed-up clinically and virologically for 2 years. In one of these PCR was still positive for Coxsackievirus-A6 RNA in the serum, suggesting that the virus had continued to replicate over years or that it established a latent infection ready to reactivate in conditions of reduced immunosurveillance. Collection of clinical data two years after the acute episode highlighted several conditions that should be considered complications of the Enterovirus infection, such as chronic fatigue syndrome and fibromyalgia.





Conclusions: Specific Enterovirus serotypes may cause atypical manifestations in adults different from HFMD, may establish persistent infection and long term sequelae.

