CLINICAL SNAPSHOT

Waterhouse-Friderichsen Syndrome in an Infant

A 10-week-old infant was admitted with acute fever (up to 39.8°C) and sudden loss of vigilance. According to the parents, the previously healthy child had had an upper airway infection for a week. The patient's general condition worsened rapidly after admission; petechial hemorrhages occurred. Intravenous volume substitution was initiated immediately. We suspected Waterhouse-Friderichsen syndrome and started the patient on cephalosporins (third generation). Circulatory and respiratory insufficiency necessitated intubation and urgent transfer to a pediatric intensive care center, where the infant was placed in isolation. Compartment syndrome developed in the lower extremities, requiring bilateral dermatofasciotomy. Despite intensive care the patient suffered progressive multiorgan failure and died 24 h after transfer. The suspicion of meningococcal sepsis, which typically occurs in the first 2 years of life, was confirmed when *Neisseria meningitidis* was detected in blood samples. Waterhouse-Friderichsen syndrome, a complication of acute bacterial meningitis, is associated with severe disseminated intravascular coagulopathy and adrenocortical insufficiency. It often ends in death despite early initiation of treatment.

PD Dr. med. Nael Hawi, MBA, Prof. Dr. med. Emmanouil Liodakis, MBA
Unfallchirurgische Klinik der Medizinischen Hochschule Hannover, hawi.nael@mh-hannover.de

Dr. med. Michael Sasse, Klinik für Pädiatrische Kardiologie und Pädiatrische Intensivmedizin der Medizinischen Hochschule Hannover

Conflict of interest statement: Dr. Sasse has received consultancy fees, reimbursement of travel and accommodation costs, and payments for training events from Shire Deutschland. The remaining authors declare that no conflict of interest exists.

Translated from the original German by David Roseveare.

Cite this as: Hawi N, Liodakis E, Sasse M: Waterhouse-Friderichsen syndrome in an infant. Dtsch Arztebl Int 2020; 117: 147. DOI: 10.3238/arztebl.2020.0147b

Petechial hemorrhages over the whole integument