

Medical Imagery

Disseminated meningococcal infection, early petechiae



Case presentation

A 21-year-old woman presented to the emergency department with a 2-day history of headache, fever and a rash involving mostly hands and knees, which had erupted that evening. The physical examination revealed pustular and petechial lesions on the palmar and dorsal side of both hands (Panel A) and on the knees, a mild swelling and pain in the right knee and tenosynovitis involving the wrists, elbows and knees. Procalcitonin was high (62 $\mu\text{g/L}$). Given the

suspicion for disseminated meningococcal infection, treatment with ceftriaxone was started and a knee lavage was performed. Synovial fluid analysis showed gram-negative diplococci (Panel B, Gram stain) and *Neisseria meningitidis* was identified through PCR (Polymerase Chain Reaction). The patient's symptoms and signs quickly improved with antimicrobial treatment, and at 4-week follow-up, no recurrence was observed. The clinical picture of disseminated meningococcal disease may initially mimic an exanthematous viral infection (Figure 1, Panel A; Figure 1 Panel B, Gram stain).

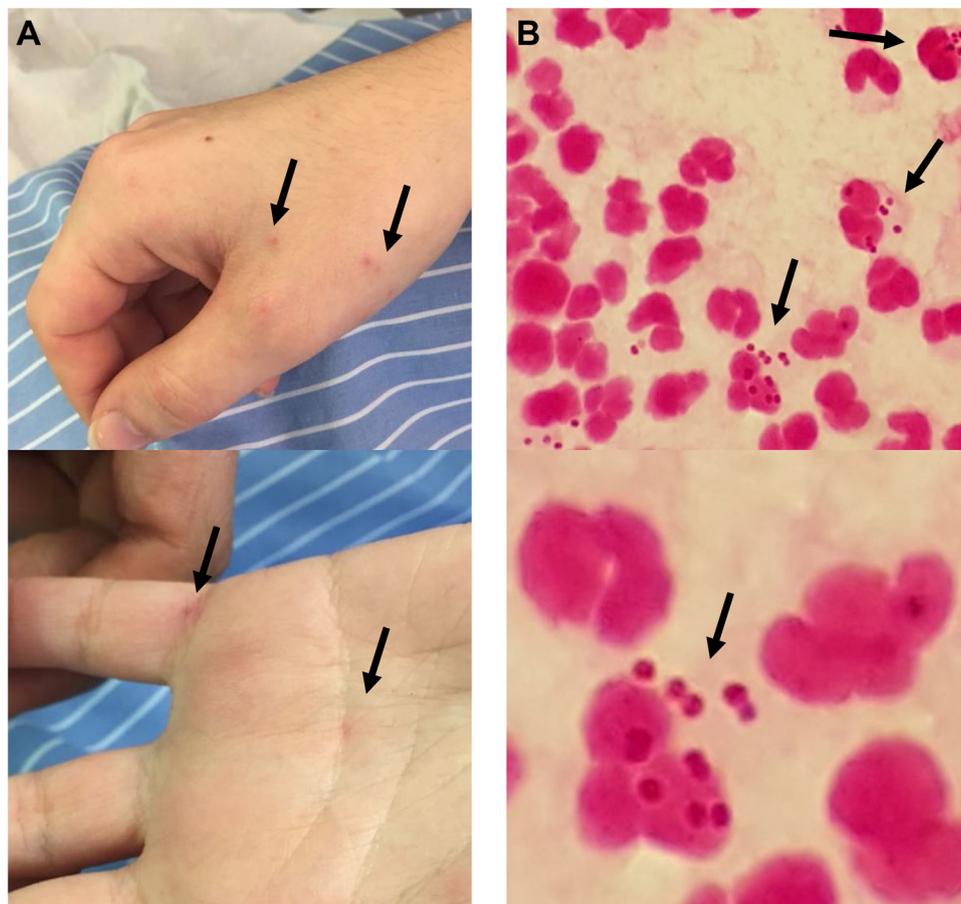


Figure 1. Panel A: pustular and petechial lesions on the palmar and dorsal side of both hands. Panel B: gram-negative diplococci in the synovial fluid direct microscopy.

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Conflict of interest

No conflict of interest to declare.

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Ethical approval

Written informed consent was obtained from the patient for the publication of this case report and the accompanying images.

Further reading

V. Masson-Behar, H. Jacquier, P. Richette, et al. Arthritis secondary to meningococcal disease: a case series of 7 patients, *Medicine (Baltimore)*, 96, 29, 2017, e7573, 10.1097/MD.00000000000007573.

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