



# Subconjunctival Bleeding in Meningococcemia

Meningokoksemide Subkonjunktival Kanama

Ergin Çiftçi<sup>1</sup>(**ID**), Tanıl Kendirli<sup>2</sup>(**ID**)

<sup>1</sup> Division of Pediatric Infectious Diseases, Department of Pediatrics, Ankara University Faculty of Medicine, Ankara, Türkiye

<sup>2</sup> Division of Pediatric Intensive Care, Department of Pediatrics, Ankara University Faculty of Medicine, Ankara, Türkiye

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A two-year-old male was admitted with complaints of fever, malaise and widespread rash on the body. It was learned that the patient's fever increased four days ago, and his body temperature was 39.2°C. Increasing rashes appeared on his body, and his general condition deteriorated. On examination, the patient had diffuse petechial eruptions. Subconjunctival hemorrhage was also detected in both eyes. The patient whose CSF findings were not compatible with meningitis was accepted as meningococcemia. *Neisseria meningitidis* growth was reported in the patient's blood culture, but serogroup determination was not made. The patient had thrombocytopenia and prolongation of prothrombin and activated thromboplastin time. Ceftriaxone, hydrocortisone, adrenaline, dopamine, albumin and fresh frozen plasma were given to the patient along with intravenous fluid therapy. The majority of skin lesions and subconjunctival hemorrhages gradually regressed. Debridement and wound care were performed for necrotic skin lesions. The patient recovered uneventfully.

*Neisseria meningitidis* causes various invasive infections, especially meningococcemia and meningitis. Endotoxin secretion in meningococcemia causes a procoagulant hemostatic environment due to the decrease of factors such as protein C, protein S, antithrombin III and tissue factor pathway inhibitor.

This process results in disseminated intravascular coagulation (DIC). DIC then causes rapid depletion of available coagulant factors followed by a bleeding tendency called consumptive coagulopathy. The prolongation of prothrombin and partial thromboplastin times and thrombocytopenia contribute to the development of skin and mucous membrane bleeding, which can progress to purpura fulminans in patients. Conjunctival petechial lesions may be found in the relatively early stages of meningococcemia.



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#### Correspondence Address/Yazışma Adresi

Ergin Çiftçi

Ankara Üniversitesi Tip Fakültesi,  
Çocuk Sağlığı ve Hastalıkları Anabilim Dalı,  
Çocuk Enfeksiyon Hastalıkları Bilim Dalı,  
Ankara-Türkiye

E-mail: erginciftci@gmail.com

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