SEVERE SKIN AND SOFT TISSUE NECROSIS RELATED TO MENINGOCOCCAL SEPSIS IN CHILDREN (132)

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Introduction: Neisseria menigitidis is a gram-negative diplococcus with diversity of clinical presentation: from asymptomatic nasopharyngeal colonisation to focal meningitis and fatal septic shock. Severe meningococcal sepsis can cause disseminated intravascular coagulopathy and combined with impaired cardiovascular function may lead to skin and soft tissue necrosis.

Methods: We reviewed the hospital records of Helsinki University Children’s Hospital with diagnosis of meningococcal infection to investigate the incidence and severity of skin and soft tissue necrosis in these patients.

Results: During 1985 - 5/2013 total of 67 children (0-15 years) were diagnosed with meningococcal infection. 31 of them developed septic disease. 2 children died of the disease. In 7 children the purpura fulminans led to skin and soft tissue necrosis that needed surgical interventions (skin/ muscle resections, amputations, skin grafting).

We present two case reports of the most extreme cases. The first one is an 11-month-old boy severe septic syndrome needing excessive vasoactive support. Due to ischemic symptoms in all of the extremities, fasciotomies and arteriolysis was performed at the initial phase. The second case is a 3 years old girl with similar symptoms, and fasciotomies were performed to all extremities. Both of these children survived, but eventually both needed amputation of three extremities.

Conclusion: Severe skin and soft tissue necrosis related to meningococcal infection is rare, but can have devastating consequences. These patients need several operations with expectant approach to avoid unnecessary proximal amputations. Close collaboration with pediatric and burn plastic surgeons is essential to achieve best possible functional and esthetic outcome.