



### 3. MENINGOCOCCAL INFECTION: CLINICAL-EVOLUTIONARY PARTICULARITIES

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**Introduction.** Meningococcal infection is an acute infectious disease caused by meningococcus, occurring with a variety of clinical manifestations - from asymptomatic carriage and nasopharyngitis to generalized forms (purulent meningitis, meningococcal meningitis and meningococemia with damage to various organs and systems). The incidence of endemic meningococcal disease ranges from 1 to 5 per 100,000 in developed countries, and from 10 to 25 per 100,000 in developing countries, with an increase in the number of cases in winter and spring, in temperate climates.

**Aim of study.** To report the clinical data of meningococcal infection from Republic of Moldova, from June 2018 through April 2022.

**Methods and materials.** The study is based on the analysis of the medical records of 21 children, of which 11 (52%) are male and 10 (48%) are female aged from 4 months to 11 years old, admitted to the Toma Ciorbă CHID during 2018- 2022. The diagnosis was confirmed by the following clinical and paraclinical methods: clinical signs, anamnestic data, bacteriological and bacterioscopic investigations.

**Results.** Of the total number of patients meningococemia occurred in 21 cases (100%), meningococcal meningitis in 19 cases (90,5%) and 18 patients (85,7%) had both. The most common manifestations were fever (100%) and hemorrhagic rash (stellate, dotted) (100%), followed by meningeal signs (66,6%) along with hyperemic oropharynx (66,6%), vomiting (61,9%), harsh breathing (23,8), hemorrhagic rash with necrosis (23,8), diarrhea (19%), headache (19%), hypertrophied tonsils (19%) , injected conjunctiva (9,5%), photophobia (9,5), enanthema (9,5), paresis-paralysis (4,7%) and in the fulminant form - coma (4,7%). Consequences of meningococemia that were found: infectious-toxic shock in 76,9 % of cases, cerebral edema in 23,8%, disseminated intravascular coagulation syndrome (DIC) in 9,5%, pulmonary edema in 4,7%, postoperative necrosis 4,7%, toxic nephropathy 4,7%. Another type of meningococcal infection, less common, meningococcal arthritis occurred in 5 cases (23,8%) of experimental / studied patients. From the study group, one case associated with DIC, acute respiratory failure, pulmonary edema, toxic nephropathy and systemic inflammatory response syndrome resulted in death.

**Conclusion.** Among the two most common forms of meningococcal infection: meningitis and meningococemia, the second one was the most prevalent in the Republic of Moldova, with corresponding complications.