

MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN (MIS-C) WITH KAWASAKI-LIKE PHENOTYPE – A CASE REPORT

Mistry Jabir Rafique, Patel Grishma Rajendrakumar,
Sadadiwala Mehul Hitesh

Grodno state medical university

Научный руководитель: professor Matsiyenskaya N. V.

Relevance. MIS-C is a delayed hyperinflammatory response to SARS-COV-2 in adolescent and pediatric population. In presentation MIS-C shares in two phenotypes – Kawasaki like disease and non specific form [1].

Object. To present a clinical case of MIS-C with Kawasaki-like phenotype in a 7.5-year-old child.

Research methods. Retrospective analysis of the medical records of a child admitted in an infectious diseases hospital with a diagnosis of MIS-C with Kawasaki-like phenotype.

Results and discussion. Clinical case. A 7.5-year-old boy, was brought to the Infectious Disease Clinical Hospital on the 3rd day of disease with complains on increased body temperature, headache, weakness, distributed maculo-papular rashes on the trunk, extremities and face.

History of diseases. A child fell ill two days before admission. On first day, the body temperature has increased to 38.5°C by giving him anti-pyretic temperature returned to normal. On next day body temperature has increased to 38.7°C and the mother noticed the appearance of a small, single macular popular elements of rash on the limbs, the trunk. The next day, the rash appeared on the face, and yesterday's elements of the rash increased in size, became confluent on the skin of the thighs. Both days he had a liquid greenish stool, vomiting. The patient had no surgical, travel and hereditary history.

Epidemiological anamnesis. In the school class 6 children were absented due to the disease. Over the past week, mother had symptoms of a cold (during this period the mother was on a business trip). All another members of the family contacted with the child were healthy. A month ago child had an acute respiratory symptoms (about rhinitis, without fever).

Objective data at admission. The body temperature was 37.6°C. The general condition was severe, stable. The child was conscious. The GCS level of consciousness was 15 points. On the face, ears of the upper and lower extremities, feet and hands, trunk, buttocks, there are elements of a rash of different sizes with a tendency to merge of an urtic character; on the skin of the thighs a rashes were a confluent character. The skin outside the rashes was of normal color, moderate moisture.

The phenomenon of cheilitis was presented as a red border of the lips of a bright red color, the skin of the lips is rough, dry, along the edge of the border there is a rash of the same nature. Lymph nodes were not palpable.

The heart sounds were loud and rhythmic. Noises were not heard. Tachycardia (HR-115 per minute) BP=120/70 mmHg. Respiratory organs: wheezing is not heard. RR=26 per min. SpO2=98% when breathing atmospheric air. Gastrointestinal tract: the tongue was moderately moist, covered with a white coating. Hyperemia of the posterior pharyngeal wall, tonsils were loose, hypertrophied, no membranes. The abdomen was soft, slightly inflated, sensitive on palpation along the bowel, liver and spleen were not enlarged. There has been no stool since admission.

According to the results of laboratory data, leukocytosis ($11,6 \times 10^9$) with neutrophilia (81%), an increased levels of CRP- 62.6 mg/L, procalcitonin -1,6 ng/ml, D-dimer- 1.37 mkg/ml were established. In the blood IgG to SARS-COV-2 were detected.

The development of an acute severe disease with severe clinical and laboratory inflammatory manifestations, a multisystem nature of the disease after a mild form of COVID-19 made it possible to establish a diagnosis of MIS-C, Kawasaki-like phenotype: exanthema, cheilitis, scleritis, infectious cardiopathy, gastrointestinal syndrome, oagulopathy.

The patient was prescribed intravenous gamma globulin, antibiotics, anticoagulants, detoxification therapy. After that patient was transferred to Paediatrics Hospital, there he was treated and recovered after 12 days.

Conclusions. A clinical case of timely diagnosed of multisystem inflammatory syndrome that developed in a child after a mild form of COVID-19, confirmed by the presence of Ig G to SARS Cov-2 in blood serum with a typical Kawasaki-like phenotype, which has been treated in accordance with the protocols and ended in recovery is presented.

ЛИТЕРАТУРА

1. Multisystem inflammatory syndrome in children and Kawasaki disease: a critical comparison / C. Sharma[et al.] //Nature reviews. Rheumatology. – 2021. – 17(12). – P. 731–748. doi.org/10.1038/s41584-021-00709-9
2. Severe COVID-19, multisystem inflammatory syndrome in children, and Kawasaki disease: immunological mechanisms, clinical manifestations and management / J. Kabeerdoss // Rheumatology international. – 2021. – 41(1). – P. 19–32. doi.org/10.1007/s00296-020-04749-4