WHEN A VIRUS HAS DIFFERENT FACES

1Sophia Siena, 1Rosa Careastre, 1Rosella Giorgio, 2Carmela De Meco, 3Irene Rutigliano, 2Pasquale Pio Maccarone, 3Francesca Lotti, 2Enrica Manca*, 1Agostino Petracaro, 1Michaela Scazzovelli, 1Jessica Cinakisi, 1Isabella Patasso, 1Anna Rita Pedico, 1Loredana Dipasquale, 2Michele Carmine Sacco, 2Massimo Petroello Mantovani. 1Residency program in Pediatrics, University of Foggia, Foggia, Italy; 2Department of Pediatrics, Pediatric Unit, ‘Casa Sollievo della Sofferenza’ Scientific Institute, University of Foggia, San Giovanni Rotondo, Italy

10.1136/archdischild-2019-epa.423

Measles is a highly contagious viral illness, characterized by fever, malaise, cough, coryza and conjunctivitis, followed by maculopapular exanthema, which spreads cephalocaudally and centrifugally. Measles, mumps, rubella (MMR) vaccination has led to the interruption of measles virus transmission and gives protection to unvaccinated individuals via herd immunity. The morbilliform exanthema can be found in various conditions, including infectious mononucleosis. It is characterized by fever, pharyngitis, lymphadenopathy and a generalized maculopapular, urticariform rash which can be present, especially after administration of beta-lactams. CASE REPORT: 17 months old male was admitted in our Pediatric department for the appearance, 4 days earlier, of rash and fever (T 38,8°C). The exanthema consisted of an erythematous, maculopapular, blanching rash, which began on the face and progressed to the truck and extremities involving the palms and soles. In some areas it showed confluent and hemorrhagic features. The physical examination showed the presence of laterocervical lymphadenopathy, nonpurulent conjunctivitis and pharyngitis. About 10 days earlier it was administered antibiotic therapy with Amoxicillin for a fever associated with malaise, cough and coryza. The child had no history of allergies and the MMR vaccine was repeatedly delayed and eventually not carried out for multiple episodes of respiratory infections. The laboratory tests showed leucocytosis with a normal differential count, mild elevation of transaminases, elevation of inflammatory markers and LDH; the morphological evaluation of the peripheral smear showed some activated lymphomonocytic cells. Given the rash characteristics and the strong suspicion of measles, the patient was admitted to isolation and infectiological tests were performed (TORCH, Monotest, Respiratory Multiplex PCR panel and a serology for measles). They all came back negative except for the anti VCA IgM for EBV infection. The patient was treated with IV fluids and antipyretic. Antibiotic therapy was administered in order to prevent bacterial superinfections. After 72 hours the rash started to darken and then to gradually fade. The patient was dismissed with the diagnosis of maculopapular exanthema in mononucleosis infection. Clinical manifestations of infectious mononucleosis can be similar to those of measles and, especially in unvaccinated patients, can sometimes be confused with it. Maculopapular exanthema can be found in various conditions, such as common viral or bacterial infections, IgA vasculitis, Kawasaki disease or drug eruption. For this reason, it is important to consider mononucleosis in the differential diagnosis of measles, especially in case of hemorrhagic and infiltrated rash, not much described in the literature.
CT angiogram showed upper peri-aortic soft tissue surrounding the origin of the coeliac axis and superior mesenteric artery (SMA) causing marked stenosis of the SMA. A working diagnosis of an inflammatory or infective Aortitis involving the proximal intra-abdominal Aorta, extending from the diaphragm to the renal vessels was made. An extensive infectious work up was performed which proved negative including exclusion of tuberculosis. C3 and IgA were marginally raised. Serum Anti Nuclear Antibodies, Anti-Double Stranded DNA Antibodies, Rheumatoid factor and urinary catecholamines were all within normal limits. PET scan confirmed uptake in the proximal abdominal aorta with associated peri-aortic soft tissue suggestive of Aortitis. A diagnosis of Takayasu arteritis- large vessel granulomatous vasculitis, was made.

Treatment was instigated with high dose intravenous methylprednisolone for three days followed by high dose oral prednisolone and subcutaneous methotrexate at a dose of 15 mg/m^2 weekly. Inflammatory markers slowly began to normalise with immunosuppressive treatment. Follow up ultrasound at one month showed interval improvement in the aortic mass with increase in the aortic lumen size. On corticosteroid wean a month showed interval improvement in the aortic mass with prednisolone and subcutaneous methotrexate at a dose of methylprednisolone for three days followed by high dose oral prednisolone for three days followed by high dose oral prednisolone. A diagnosis of Takayasu arteritis- large vessel granulomatous vasculitis, was made.

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