KAWASAKI DISEASE TRIGGERED BY CYTOMEGALOVIRUS INFECTION IN A TEENAGER: CASE REPORT

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BACKGROUND

Kawasaki disease (KD) is one of the most common vasculitis that affects children usually under 5 years old. It is characterized by persistent fever (> 5 days), other manifestations of acute inflammation and cardiovascular complications, such as coronary artery aneurysms. There is important genetic influence that interacts with environmental factors, with infections being recognized triggers for disease development. We present a case of KD in a 12-year-old girl who had cytomegalovirus infection as a possible trigger for the disease.

CASE REPORT

A 12-year-old female patient, previously healthy, attended the emergency room with persistent fever (> 10 days) and oral lesions, with no improvement with prescribed antibiotic therapy (benzathine penicillin). Upon physical examination evidence of mucositis, with extensive lesions on the lips, conjunctival hyperemia, palmoplantar desquamation and diffuse maculopapular rash. Laboratory tests revealed leukocytosis and increased acute phase reactants. There was a positive finding of viral DNA of Cytomegalovirus and negative serologies for other infectious agents. With the presumed diagnosis of KD, she underwent an echocardiogram that showed no alterations and started treatment with anti-inflammatory dose of acetyl salicylic acid (ASA) and intravenous immunoglobulin 2g/kg. She was discharged with complete resolution of the symptoms to maintain an ambulatory follow-up with low dose ASA until a control echocardiogram.

CONCLUSION

Several epidemiological studies suggest that KD can be caused or triggered by infectious agents. This theory takes into account the similarity between KD and other pediatric infectious diseases, increased incidence in summer and winter months, close relatives who develop the disease a few days after the index case, rarity of the disease in children less than 6 months (protection by maternal antibodies). The disease is usually self-limited and should be considered in the differential diagnosis of other common childhood diseases, since early treatment prevents complications such as coronary aneurysms (incidence reduction from 25% to 5%). The diagnosis is based on the following criteria: Fever lasting ≥5 days associated with 4 of the 5 criteria: polymorphous rash, bilateral bulbar conjunctival injection without exudate, oropharynx changes (fissures, raspberry tongue, oropharynx hyperemia without exudate), changes in extremities (edema of hands and feet, periungual scaling, palmar erythema) and increased cervical lymph nodes.

The treatment consists of the use of high dose ASA (80-100mg/kg/day) associated with intravenous immunoglobulin (2g/kg), maintaining an antiplatelet dose of ASA (3-5mg/kg/day) as fever resolves. The prognosis for uncomplicated disease is usually good.