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Webinar

Erythema and inoculation of bacillus calmett-guerin (bcgitis) as a predictive sign of incomplete kawasaki disease (kd) atypical and refractory. Presentation of a case

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INTRODUCTION

The syndrome or Kawasaki disease is a childhood vasculitis, with cardiovascular disease, acute, self-limited, but potentially serious due to the cardiac complications that can occur. Although it is more frequent in Asian countries and currently has a universal distribution. It affects young children and 85% of them are under 5 years old, of these 50% are under 2 years old. It is more frequent in males with a ratio of 1.5 - 2.1: 1. No single pathognomonic clinical or laboratory finding for its definitive diagnosis has been identified.

To establish a diagnosis, we inevitably depend on the diagnostic criteria that include the typical constellation of symptoms and signs noted by the Japanese Kawasaki research committee or by the American Heart Association.

As pediatricians occasionally encounter febrile children who do not fulfill the diagnostic criteria but who have several findings compatible with dose of Kawasaki disease is a clinical challenge that can not be avoided by delaying the diagnosis because the risk of coronary complications is seen even in incomplete presentation of the disease.]

Since 1966, the Korean Pediatric Society has recommended that a routine universal Bacille Calmette-Guérin (BCG) be given to neonates.

In 1951, the Bacillus Calmette-Guerin vaccination was started in Mexico, one of the signs of great value being the presence of erythema and induration at the site of inoculation of the vaccine, when it has been applied recently (six months to one year). This sign is present in 36% of cases and has been incorporated into the diagnostic guidelines for Kawasaki disease in Japan.

This disease was first described by Tomisaku Kawasaki in Tokyo Japan in 1967 and the vaccine is also applied in Japan. There are other countries where the tuberculin skin test (PPD) is performed as a diagnostic tool for Mycobacterium tuberculosis infection.

The etiology of Kawasaki disease is still unknown but most epidemiological data suggest an infectious origin. The possibility

that Kawasaki disease vasculitis was caused by an agent that acts as a trigger for an immune response in endothelial cells has also been evaluated, rather than by the direct action of the infection on the vessels.

We present the clinical case of a 10 - month - old infant, who presents a clinical picture of incomplete, atypical and refractory Kawasaki disease, with a 5 - day fever, two main criteria and mild pericardial effusion plus BCGitis as a diagnostic sign so as not to delay early treatment.

CLINICAL CASE.

A 10 - month - old male infant, with no personal pathological perinatal history, fed exclusively at the mother's breast, with a complete immunization schedule for his age. Starts 5 previous days with fever of 39 - 40 °C., diarrhea and abdominal pain, on physical examination we found bilateral conjunctival injection, branched tongue, fissured lips and BCGitis of 2 cm in diameter with erythema and induration, a poor general condition, continuous crying, no murmurs, no hepatomegaly, Echocardiogram with mild pericardial effusion and normal ECG.

Laboratory Hb 10.2g / dl, leukocytes 13,800 x mm³, segmented predominance, normal platelets. Blood chemistry, kidney function tests, and normal electrolytes. Urine test with leukocytes 48 - 50 xc and pyocytes 90 %. CRP 200 mg / L ESR 65 mm / h and Procalcitonin 8.84 ng / ml.

He was treated with a single dose of 2g / kg gamma globulin in a 12-hour infusion plus Aspirin at 100 mg / kg / day divided into 4 doses with an unfavorable response, since the fever reappeared at 36 hrs. From the beginning of the first treatment as well as an increase in acute phase reactants, lipid profile, cardiac enzymes, decrease in arterial gases and persistence of BCGitis. A second dose of Gamma globulin is started at a dose of 2g / kg in a 12-hour infusion, the fever disappeared 72 hours later and treatment with acetylsalicylic acid is started at a dose of 100 mgr per kg per day in 4 doses, later it is started with antiaggregant dose 5 mg / kg / day in a single daily dose up to 8 weeks that a normal echocardiogram was found.

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DISCUSSION .

Checking a clinical picture of Kawasaki disease implies ruling out other entities such as Scarlet fever, Stevens-Johnson Syndrome and viral exanthems, among others, and is based on the specific criteria set forth by the research committee of the mucocutaneous nodal syndrome in Japan. The criteria for Kawasaki disease are 5 days of fever and 4 main criteria in the presence of coronary abnormalities on echocardiography.

The term atypical or incomplete Kawasaki is reserved for those cases in which the presentation of the disease has an atypical clinic (for example, with renal involvement, acute abdomen, pleural effusion), as in our case which only presented fever of 5 days and 2 main criteria as well as mild pericardial effusion and BCGitis.

Atypical incomplete Kawasaki like the case presented is more frequent at an early age, so it is important to make a diagnosis and start an early treatment, since these children have a higher risk of coronary heart disease. In this case, we should pay special attention to other clinical and analytical data that help us in the diagnosis even if they are not within the diagnostic criteria. We know that most of the time the diagnosis of this disease is not easy.

The current recommendations are to administer gamma globulins before day 10, and if possible before day 7 of the disease, start treatment before day 5 of disease it does not seem to reduce the risk of aneurysm formation instead it could be associated with a greater need for retreatment as it was in our case.

Importantly, erythema at the BCG and PPD inoculation sites has been described in EK, reinforcing the notion that it is a non-specific inflammatory reaction. Likewise, it has been suggested that the tuberculin skin test (PPD) could provide a diagnostic tool to identify incomplete forms of Kawasaki disease in unvaccinated patients.

BCGitis is a predictive sign of diagnostic utility in Incomplete Kawasaki disease in infants under 12 months of age, who have the vaccine in our Country, Mexico

RESULTS

Dra. Laura Castañeda Ramirez is a pediatrician with over 20 years of experience on the medicine in México, she had worked in the public and private sector. Currently she is the head of pediatrics in Hospiten Los Cabos.

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