

KAWASAKI DISEASE WITH PERIPHERAL GANGRENE AND AUTOAMPUTATION - AN EXTREMELY RARE COMPLICATION: A CASE REPORT

CHOROBA KAWASAKI Z OBWODOWĄ ZGORZELĄ I AUTOAMPUTACJĄ - NIEZWYKLE RZADKA KOMPLIKACJA: OPIS PRZYPADKU

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Abstract

Kawasaki disease (KD) is a form of acute vasculitis involving small and medium sized arteries. Ischemic necrosis of the extremities is a very rare and potentially severe complication of KD. Here we present a case of KD with peripheral gangrene and auto amputation, which is the first such case to be reported from India and the fourteenth case in medical literature. A one year old child with KD and peripheral gangrene was started on aspirin. The digital gangrene resolved on follow up with amputation of the tip of the right index finger.

Streszczenie

Choroba Kawasaki (KD) to forma ostrego zapalenia naczyń z udziałem małych i średnich tętnic. Martwica kończyn jest bardzo rzadkim i potencjalnie ciężkim powikłaniem KD. Poniżej prezentujemy przypadek KD z obwodową gangreną i autoamputacją, który jest pierwszym takim przypadkiem zgłoszonym w Indii i 14-tym przypadkiem w literaturze medycznej. U rocznego dziecka z KD i zgorzelą obwodową rozpoczęto leczenie aspiryną. Obserwowano zgorzel palców z amputacją końcówki prawego palca wskazującego.

Key words: amputation; digital gangrene; Kawasaki disease; vasculitis

Słowa kluczowe: amputacja; zgorzel; choroba Kawasaki; zapalenie naczyń

Introduction

Kawasaki disease (KD) is a form of acute vasculitis involving small and medium sized arteries. Ischemic necrosis of the extremities is a very rare and potentially severe complication of KD. Here we present a case of KD with peripheral gangrene and auto amputation, which is the first such case to be reported from India and the fourteenth case in medical literature [1].

Case Report

A one year old boy was admitted with history of fever for 20 days associated with maculopapular rash, irritability, congestion of the oral cavity and conjunctiva, and peripheral gangrene for the previous one week. The fever was moderate grade, intermittent, associated with irritability. Five days later, the child developed a maculopapular rash which started over the extremities and later became generalised. It was associated with redness of the oral cavity, lips and the eyes which resolved over a period of one week. Gangrene

of the toes and the fingers was noticed 10 days after the onset of fever. On examination the child had a height of 75 cms and weight of 8 kgs. He was irritable, febrile (100.6F) with a heart rate of 130/min and BP of 106/68mm hg. All his pulses were well felt with a capillary filling time of less than 3 seconds. Left sided cervical lymphadenopathy was present along with pallor and bilateral pedal and dorsal oedema. There was desquamation of the skin over the upper and lower extremities with gangrene on the right index finger and bilateral great toes. Blackish discoloration was noticed over other toes and fingers (Fig. 1). Systemic examination did not reveal any sign. Child was discharged following 7 days of antibiotics. At follow up the child was afebrile, not irritable and showed autoamputation of the tip of the right index finger (Fig. 2). The other sites of peripheral gangrene had resolved. Investigations revealed a decreased ESR, CRP, Total WBC and platelet count. Treatment was changed over to low dose aspirin for a period of 6 weeks and was gradually stopped.



Figure 1. Peripheral gangrene of the fingers

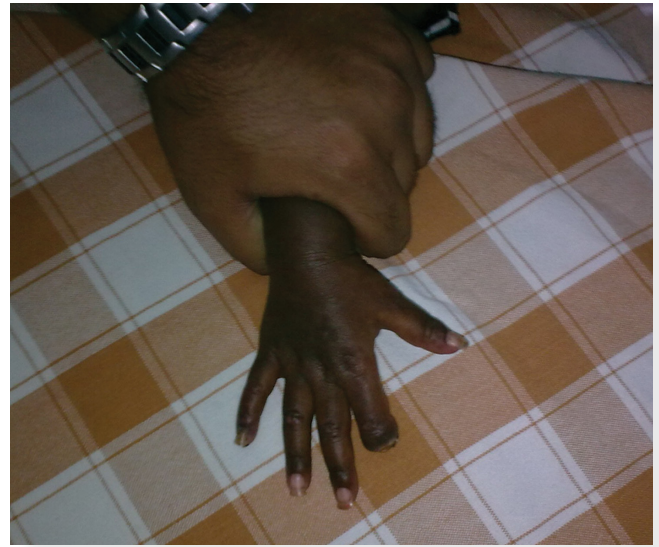


Figure 1. Auto amputation of the tip of the right index finger at follow up

Discussion

Kawasaki disease is an acute systemic vasculitis involving the medium-to-small arteries of young children. Thirteen cases of KD with peripheral gangrene and auto amputation have been reported in the literature; only two of them were Asian children, and none from India [2]. The previous cases of KD complicated with peripheral gangrene were younger than 7 months of age while our patient was around one year of age [3, 4].

A majority of the reported cases eventually suffered from some serious complications, including two deaths. Therefore, peripheral gangrene in KD indicates an underlying severe systemic vasculitis, and predicts serious sequela, especially to the heart. Our case did not have any cardiac involvement even during follow up and did not suffer any other life threatening complication.

Various medications have been tried for treating peripheral gangrene in KD, including heparin, warfarin, urokinase, dipyridamole, nitroprusside, glyceryl trinitrate, sympathetic or caudal block, prostacyclin, and prostaglandin E1 [4]. In our case only aspirin was used as the child could not afford Intravenous immunoglobulin (IVIG). The only sequela to his peripheral gangrene was an amputation at the tip of the right

index finger while his peripheral gangrene resolved.

In conclusion since peripheral gangrene in KD is associated with high incidence of amputations and death, an early diagnosis and effective treatment is recommended in all such cases.

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