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Case Report

A Case Report on Kawasaki Disease

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Abstract

Kawasaki disease is a vascular and self-limiting disease mainly effecting small to medium sized vessel. Mostly affecting the children of less than 5 years. Most of the patients has a genetic predisposition. Genetically susceptible individuals exposed to infectious agents/ environmental trigger may develop Kawasaki disease. Clinical presentations are fever, polymorphous rashes along the trunk, strawberry tongue, swollen lymph nodes around neck. Skin of palms and soles can be swollen and red. Lips are cracked, red and dry. A 7 year old male patient was brought to emergency department with Scarlett fever, dry lips, Thickening of palmar skin, Itching. Patient was shifted to pediatrics department and was provided with adequate treatment.

Keywords: Kawasaki disease, Genetically susceptible, Strawberry tongue, polymorphous rashes.

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INTRODUCTION

Kawasaki disease is a vascular and self-limiting disease mainly effecting small to medium sized vessel.[1] Mostly affecting the children of less than 5 years. The prevalence rate is higher in Asian population when compared to non-Asian population.[2] A number of hypothesis are proposed for etiopathogenesis. The vasculitis process is divided into three phases: (a) Acute necrotizing phase, (b) Sub acute/chronic arteritis phase, and (C) Luminal myofibroblastic phase.[3] Most of the patients has a genetic predisposition. Increased susceptibility in children with polymorphism of IgG receptor. Genetically susceptible individuals exposed to infectious agents/ environmental trigger may develop Kawasaki disease. Various genes like inositol 1,4,5 triphosphate 3-kinase C (ITPKC), Caspase-3 calcium release activated calcium modulator (ORAI 1) and CD-40.[4] Over activity of Transforming growth factor (TGF-b) play a role in Coronary artery aneurysms. Symptoms of Kawasaki disease are similar to common febrile illness. Untreated patients may develop coronary artery abnormalities which can lead to mortality. The clinical course of Kawasaki disease in divided into three phases: (a) acute febrile phase, (b) Subacute phase, and (C) convalescent phase. Clinical presentations are fever, polymorphous rashes along the trunk, strawberry tongue, swollen lymph nodes around neck. Skin of palms and soles can be swollen and red. Lips are cracked, red and dry.[3] Diagnosis of Kawasaki disease is quite difficult, but we follow two set of guidelines: American Heart Association (2004 and 2017) and Kawasaki Disease Research Committee guidelines (2002).[5] Cardiac complication is common in Kawasaki Disease and it can be evaluated by Two-dimensional Echocardiography.[6] Major goal of treatment involves stopping the progression of inflammation and vascular damage. Standard treatment of Kawasaki disease is Intravenous Immunoglobulin (IvIg). Aspirin and anticoagulant are used for Cardiovascular management.[7] Treatment options for resistant Kawasaki disease are Corticosteroid, Tumor necrosis factor-alpha blocker (Infliximab), Cyclosporine, Plasma exchange and Cytotoxic agent.[8].

CASE REPORT

A 7 year old male patient was brought to emergency department of Owaisi Hospital and Research Centre with complaints of Rashes all over the body since 10 days, itching since 10 days, fever 2 days, dry lips since 2 days, and thickening of palmar skin.

The patients vitals at the time of admission were temp 98.6° F, Pulse rate:- 80 beats per minute. Day wise patient vitals were mentioned in

INVESTIGATIONS:

COMPLETE BLOOD PICTURE:-

Hb – 7.8 g/dl

Platelet: - 4.5 lakhs/cumm (normal value:- 1.5-4.5 lakhs/cumm)

Liver function test was normal.

Complete urine examination:-

Pale yellow, acidic, clear.

Pus cells:- 1-2 H/F

Epithelial cells: - 2-3 H/F

Widal test was negative.

Differential diagnosis:-

Physical examination like Erythema on palms and soles with diffused thickening, Scarlett fever exfoliation of tips of fingers, scaly coalescent popular sun lesions present all body but on trunk and anal region, scaling and exfoliation of lips with prominent papillae over tongue, and perianal scaly plaques. Based on physical examination, patient was diagnosed with Kawasaki disease.

Treatment:-

Upon admission patient was provided with syrup hydroxyzine 3.5 ml twice a day, topical liquid paraffin Thrice a day, tropical soft paraffin thrice a day, Tab aspirin 5 mg/kg once a day, Tab lansoprazole 15 mg once a day, and tab cefixime 100 mg.

Outcomes and follow up:-

Patient was kept under observation for 2 days. After 2 days, when patient's condition stabilized he was discharged. Patient's guardians were in contact with physician regularly and condition was closely monitored.

DISCUSSION

Kawasaki disease is self limiting disease. If patients left untreated may develop serious complications. Patient was diagnosed based on the clinical features like Scarlett fever, dry lips, polymorphous rashes, itching, and Thickening of palmar skin. Patient was provided with adequate treatment upon admission to pediatrics ward. Patient was monitored closely during the course of admission for complications. Patient was discharged after 2 days, when patient's condition was stabilized. Patient should be monitored closely after discharge as there are chances of developing complications.

CONFLICT OF INTEREST

The authors declare they have no conflict of interest.

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