

Case Report on Kawasaki Disease with Rectal Prolapse

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Abstract

Background: Mucocutaneous lymph node syndrome and infantile polyarthritis nodes are other names for Kawasaki illness, which is characterized by inflammation of the walls of various blood vessels in the body. It is particularly common among children and adolescents. **Case presentation:** A 6-year-old male child was brought by his parent to the pediatric unit after suffering from high-grade intermittent fevers of up to 102°F for three days, mild dehydration, tachycardia, rhinorrhea, cough, oropharyngeal changes, and oral thrush. He has a history of the previous hospitalization for a mild case of rectal prolapse which was pushed into place manually. On physical examination, he was agitated, febrile, and had a body temperature of 102°F. He also had mild swelling in the lymph node, no pallor but some dehydration, tachycardia (130 bpm), a respiratory rate of 35 breaths per minute, redness of the tongue, redness of the sole, a skin rash, and edematous lips. Later he was treated with antiplatelets, antibiotics, and intravenous fluids. **Conclusion:** Kawasaki disease (KD), an unusual kind of systemic inflammation, is most frequently found in children below the age of five. Due to the maternal antibodies' protective qualities, Kawasaki disease is rarely diagnosed in infants under the age of four months. There are ten to twenty occurrences per 100,000 children under five. The most well-known cause of acquired cardiovascular disease in newborns and young children is Kawasaki disease. If recognized and treated promptly, kids feel better in a few days and have a low risk of developing long-term heart issues.

Keywords: Kawasaki disease, Rectal prolapse, Lymphadenopathy, Vascularity.

INTRODUCTION

The majority of newborns and young children are affected by Kawasaki disease (KD), an acute multisystem vasculitic condition. Patients with KD rarely develop neurological problems, and the diagnosis can be difficult. (1) Around 80% of individuals with Kawasaki disease are under the age of five, making it nearly exclusively a condition of young children. (2) The majority of people who develop Kawasaki disease (KD) are infants and young kids. It is an acute, self-limiting vasculitis with no known cause. The coronary arteries and other cardiovascular structures are the targets of KD, which first presents as high fever, mucocutaneous inflammation, and cervical lymphadenopathy. (3)

The main symptoms of Kawasaki disease are high body temperature than normal, bilateral nonexudative inflammation of the conjunctiva, redness of the lips and oral mucosa, alterations in the limbs, rash, and cervical lymphadenopathy. Untreated coronary artery aneurysms can result in heart attack, sudden cardiac arrest, or ischemic cardiovascular disease in 15% to 25% of children with the disorder.. (4)

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CASE PRESENTATION:

A 6-year-old male child was brought by his parent to the pediatric unit after suffering from high-grade intermittent fevers of up to 102°F for three days, mild dehydration, tachycardia, rhinorrhea, cough, oropharyngeal changes, and oral thrush.

As narrated by the parents he was apparently alright before 1 month after that he started to show symptoms of high-grade fever up to 102°F for 3 days which was continuous, rhinorrhea along with cough and oral thrush for 6 days for that he was treated in the local clinic with some antibiotic and antipyretic medications. Although he did not get relief so he was shifted to a tertiary care hospital for further management.

As per his parents, he was previously hospitalized for a mild case of rectal prolapse 6 months ago the physician push the prolapse back in place and after that, he was put on antibiotics and analgesics and got discharged after 4 days of hospitalization. Afterward, no hospitalization history was found.

On physical examination, he was agitated, febrile, and had a body temperature of 102°F. He also had mild swelling in the lymph node, no pallor but some dehydration, tachycardia (130 bpm), a respiratory rate of 35 breaths per minute, redness of the tongue, redness of the sole, a skin rash, and edematous lips.

On laboratory examination, platelet count increased to 470000/cumm, white blood cell count increased to 13,000/cumm, also ESR values increased to 13mm/h. On radiological investigation, USG of the Left dorsum of the foot reveals mildly thickness of subcutaneous tissue with minimal vascularity on Doppler.

The patient was treated with Inj ceftriaxone 750 mg BD. Inj Pan 20 mg OD, Inj Lasix 0.7ml BD, Tab Aspirin 150 mg QID, Syrp. Ibugesic plus 5ml SOS. also provided appropriate treatment for dehydration as a priority i.e., Intravenous fluid DNS 400ml (twice a day intravenously), and the child shows great improvement. On the 10th day of hospitalization, the child's vitals were stable. Medical management continued and the patient's prognosis was good and advised the patient for a regular 15-day follow-up.

DISCUSSION:

Numerous theories have been put up to explain the disease's cause, which is currently unclear. These theories range from viral etiology to genetic and environmental variables. There are two types of Kawasaki disease: complete (typical) and incomplete (atypical). (5) Patients with Kawasaki disease frequently experience neutrophilia during the acute phase of the illness, which frequently includes immature forms, raised acute phase reactants, moderate anemia, hypoalbuminemia, and elevated blood immunoglobulin E levels. When one or more lymph nodes in the cervical region

measure greater than 1.5 cm in diameter, cervical lymphadenopathy is regarded as a primary finding. The nodes are often hard and barely sensitive, and the lymphadenopathy is typically unilateral. (6-14) Conventionally, aspirin is used for its anti-inflammatory (80 mg/kg/day) and anti-platelet (3 mg/kg/day) properties; nevertheless, it has little effect on the frequency of coronary aneurysms. (15-20) In some cases, patients who do not respond to IVIG, steroids, and anti-TNF are treated with additional immunosuppressive medications such ciclosporin, cyclophosphamide, methotrexate, and plasma exchange.(20)

CONCLUSION:

Children under the age of five are most commonly affected with Kawasaki disease (KD), an uncommon kind of systemic inflammation. Kawasaki illness is rarely found in newborns under the age of four months, likely due to the protective effects of maternal antibodies. Ten to twenty instances per 100,000 children under the age of five are prevalent. Kawasaki illness is the most familiar origin of acquired heart disease in infants and toddlers. Inflammation of the blood vessels is a sign of this illness, and it can be quite severe. Children with Kawasaki illness may experience rash enlarged neck glands, swollen hands and feet, and red eyes, lips, and tongue in addition to a fever that lasts several days. Kawasaki's illness can impact the function of the heart muscle or heart valves early in the disease's progression. Children can feel better in a few days if they are diagnosed and treated early, and there is a low chance of long-term heart problems.

REFERENCES

- 1- Zhang B, Hao Y, Zhang Y, Yang N, Li H, Liang J. Kawasaki disease manifesting as bilateral facial nerve palsy and meningitis: a case report and literature review. *J Int Med Res.* 2019 Aug;47(8):4014–8.
- 2- Shulman ST, Inocencio JD, Hirsch R. Kawasaki Disease. *Pediatric Clinics of North America.* 1995 Oct 1;42(5):1205–22.
- 3- Newburger JW, Takahashi M, Burns JC. Kawasaki Disease. *Journal of the American College of Cardiology.* 2016 Apr 12;67(14):1738–49.
- 4- Kim DS. Kawasaki Disease. *Yonsei Med J.* 2006 Dec 31;47(6):759–72.
- 5- Osman RS, Salum HM, Noorani M. Kawasaki disease presenting after intussusception: a case report. *J Med Case Rep.* 2021 Jun 23;15(1):323. 01.CIR.87.5.pdf [Internet]. [cited 2022 Aug 11]. Available from: <https://www.ahajournals.org/doi/pdf/10.1161/01.CIR.87.5.1776>
- 7- Newburger JW, Fulton DR. Kawasaki disease. *Current Opinion in Pediatrics.* 2004 Oct;16(5):508–14.
- 8- Eleftheriou D, Levin M, Shingadia D, Tulloh R, Klein NJ, Brogan PA. Management of Kawasaki disease. *Archives of Disease in Childhood.* 2014 Jan 1;99(1):74–83.
- 9- Khandare, K., Ghormode, P., 2020. Prolapsed rectal submucosal hematoma in pediatric case. *PAN AFRICAN MEDICAL JOURNAL* 37. <https://doi.org/10.11604/pamj.2020.37.154.26149>
- 10- Sreedhar, R., Jajoo, S., Yeola, M., Lamture, Y., Tote, D., 2020. Role of Tumour Markers CEA and CA19-9 in Colorectal Cancer. *JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS* 9, 3483–3488. <https://doi.org/10.14260/jemds/2020/762>
- 11- Tote, D., Domakunti, R., Tote, S., 2020. Scenario of Rectal Carcinoma

- Cases in a Rural Setting of Central India. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 3434–3438. <https://doi.org/10.14260/jemds/2020/753>
- 12- Patel, Nidhi, and Kiran Borkar. “Comparing the Effectiveness of Transrectal Misoprostol with Intravenous Oxytocin in Active Management of Third Stage of Labour in Preventing Post-Partum Hemorrhage.” *Journal of Pharmaceutical Research International*, July 31, 2021, 272–78. <https://doi.org/10.9734/jpri/2021/v33i39A32170>.
 - 13- Gupta, K.R., Sawarkar, G., Jadhav, U., 2020. Critical appraisal of pipasa in chronic obstructive pulmonary disease. INTERNATIONAL JOURNAL OF AYURVEDIC MEDICINE 11, 44–49.
 - 14- Gupta, R.K., Deogade, M., 2020. HPTLC FINGER PRINT PROFILE OF ROOT EXTRACTS OF MARTYNIA ANNUA LINN. INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES AND RESEARCH 11, 3450–3456. [https://doi.org/10.13040/IJPSR.0975-8232.11\(7\).3450-56](https://doi.org/10.13040/IJPSR.0975-8232.11(7).3450-56)
 - 15- Gupta, R.S., Phatak, S.V., Varma, A.D., Gulve, S.S., 2020. Mediastinal Non-Hodgkin Lymphoma with Bilateral Pleural Involvement - Role of Sonography. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 3509–3511. <https://doi.org/10.14260/jemds/2020/769>
 - 16- Gupta, S.S., Thosar, N., Rathi, N., Baliga, S.M., Thakkar, Y., Deulkar, P., 2020. Evaluation of Antibacterial Efficacy of Vitex negundo Linn. extract as Root Canal Irrigant against Enterococcus faecalis and its penetration into Root Dentin: An in-vitro study. INTERNATIONAL JOURNAL OF AYURVEDIC MEDICINE 11, 193–199.
 - 17- Gupte, M., Jadhav, U., Ghewade, B., Sherekar, D., Gandhasiri, D., 2020. To study the incidence of lung cancer in patients of newly and previously diagnosed Chronic Obstructive Pulmonary Disease at AVBRH. MEDICAL SCIENCE 24, 658–663.
 - 18- Singhai, N.R., Shinde, R.K., 2020. An Observational Study of Demography, Clinical Characteristics, and Outcomes, of Dismembered Pyeloplasty for the Management of Pelviureteric Junction Obstruction. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 2191–2196. <https://doi.org/10.14260/jemds/2020/477>
 - 19- Singhal, C., Varma, A., Acharya, S., 2020. Assessment of Capillary Blood Glucose Levels as a Prognostic Indicator in Acute Ischemic Stroke. JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS 9, 1237–1241. <https://doi.org/10.14260/jemds/2020/269>
 - 20- Sinha, S., Sinha, R.K., Phansopkar, P., Chaudhary, S., 2020. Effect of psychomotor physiotherapy with individualized physiotherapy program on pain, kinesiophobia and functional outcome following Transforaminal Interbody Lumbar Fusion (TLIF): A case report. MEDICAL SCIENCE 24, 4091–4097.