Case study

A Case Report of Paratyphoid with only diarrhea in a 5-Year-Old Boy

Comment [1]: A Case Report of Paratyphoid fever with diarrhea in a 5-Year-Old Boy

Abstract:

Comment [2]: Too short

We present a case of a 5-year-old boy who presented with mild watery diarrhea for 5 days, which did not respond to conventional acute gastroenteritis management. Further evaluation in the second week of illness revealed paratyphi on stool culture, and the child responded well to cefotaxim injection after 3 days of starting injections. The child did not present with other classical symptoms, such as fever, vomiting, or rose spots, and other classical investigations like blood culture and urine culture were negative. This case highlights the importance of considering paratyphoid fever as a potential etiology for persistent diarrhea, even in young children, and the importance of prompt diagnosis and treatment with appropriate antibiotics, especially in the absence of classical clinical or laboratory findings.Introduction: Paratyphoid fever is a systemic bacterial infection caused by Salmonella paratyphi A, B, or C. It is most commonly associated with travel to endemic areas but can occur sporadically in non-endemic areas. While the disease is more commonly seen in adults, it can occur in children, and the presentation can be variable. We report a case of paratyphoid fever in a 5-year-old boy who presented with persistent diarrhea.

Comment [3]: Where? Location please

Keywords : Paratyphi, Diarrhea, Prolonged diarrhea

Introduction

Comment [4]: Seems too short

Paratyphoid fever is a systemic bacterial infection caused by Salmonella paratyphi A, B, or C. It is most commonly associated with travel to endemic areas but can occur sporadically in non-endemic areas. While the disease is more commonly seen in adults, it can occur in children, and the presentation can be variable [1,2]. Cases of paratyphoid fever caused by Paratyphi B and Paratyphi C are rarely reported. Approximately 85% of typhoid fever and 92% of paratyphoid fever cases in the United States occur among international travelers; of those, 80% of typhoid and 91% of paratyphoid fever cases caused by Paratyphi A are acquired by travelers to southern Asia (primarily India, Pakistan, or Bangladesh) [3-8]. The present case study report a Paratyphoid disease with only diarrhea in a 5-Year-Old Boy.

Case Report:

We report the case of a 5-year-old boy who presented to our hospital with mild watery diarrhea for 5 days, along with abdominal discomfort and loss of appetite. The child had no history of recent travel, consumption of contaminated food or water, or contact with sick individuals. The initial management was done as per standard guidelines for acute gastroenteritis, but the symptoms did not improve. On the 7th day of illness, the child was re-evaluated, and further investigations were done to identify the underlying cause of diarrhea.

Stool culture was performed, and the report revealed the growth of Salmonella enterica serovar Paratyphi A. The organism was confirmed by standard biochemical tests, and

antimicrobial susceptibility testing was done as per the Clinical and Laboratory Standards Institute guidelines. The isolate was found to be sensitive to cefotaxime, ceftriaxone, azithromycin, and chloramphenicol but resistant to ampicillin and trimethoprim-sulfamethoxazole.

The patient was started on intravenous cefotaxime at a dose of 100 mg/kg/day. The child's diarrhea and abdominal discomfort improved significantly within 3 days of initiating the therapy. The child was continued on intravenous cefotaxime for a total of 14 days, after which he was discharged from the hospital in a stable condition.

The child did not develop fever, vomiting, or rose spots, which are typical clinical features of typhoid fever. Blood culture and urine culture were negative for any bacterial growth. The child's family members were also screened for any symptoms of diarrhea or fever, and they were found to be asymptomatic.

The emergence of multidrug-resistant strains of Salmonella enterica serovar Paratyphi A is a growing concern in many parts of the world, especially in developing countries like India (5, 9). This has led to the increasing use of third-generation cephalosporins and fluoroquinolones as first-line therapy for the treatment of enteric fever caused by this organism (9, 10).

Discussion:

Paratyphoid fever is a systemic bacterial infection caused by Salmonella paratyphi A, B, or C. It is most commonly associated with travel to endemic areas but can occur sporadically in non-endemic areas (1). While the disease is more commonly seen in adults, it can occur in children, and the presentation can be variable (2).

In our case, a 5-year-old boy presented with mild watery diarrhea for 5 days, which did not respond to conventional acute gastroenteritis management. Further evaluation in the second week of illness revealed paratyphi on stool culture, and the child responded well to cefotaxim injection after 3 days of starting injections. The child did not present with other classical symptoms, such as fever, vomiting, or rose spots, and other classical investigations like blood culture and urine culture were negative.

The diagnosis of paratyphoid fever can be challenging, especially in non-endemic areas, as it is often not considered in the differential diagnosis of acute diarrhea. This can result in delayed diagnosis and treatment, leading to an increased risk of complications and mortality (3). The clinical presentation of paratyphoid fever can be variable, ranging from asymptomatic to severe illness, and can include symptoms such as fever, abdominal pain, diarrhea, vomiting, headache, and myalgia (4). However, as seen in our case, these classical symptoms may not always be present, making diagnosis more challenging.

Laboratory investigations, such as stool culture, blood culture, and serology, can aid in the diagnosis of paratyphoid fever. However, these investigations may be negative in the early stages of the disease, and multiple samples may be required for a definitive diagnosis (5). In our case, stool culture was the diagnostic test that confirmed the presence of paratyphi. Other classical investigations, such as blood culture and urine culture, were negative.

Treatment for paratyphoid fever involves appropriate antibiotic therapy based on susceptibility testing. In non-endemic areas, the choice of antibiotics may be influenced by

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the patterns of antibiotic resistance observed in endemic areas (6). In our case, the child responded well to cefotaxim injection after 3 days of starting injections.

Conclusion:

We report a case of paratyphoid fever in a 5-year-old boy who presented with persistent diarrhea. The case highlights the importance of considering paratyphoid fever as a potential etiology for persistent diarrhea, even in young children, and the importance of prompt diagnosis and treatment with appropriate antibiotics. In addition to the absence of other clinical symptoms, such as fever, vomiting, and rose spots, other classical investigations like blood culture and urine culture were negative in this case. Despite this, stool culture revealed Salmonella paratyphi, which prompted appropriate management with antibiotics. This highlights the importance of considering paratyphoid fever as a possible cause of persistent diarrhea, even in the absence of classical clinical or laboratory findings.

References :

Comment [10]: References are too few

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