

***Campylobacter Jejuni* Gastroenteritis Complicated by Pancytopenia**

We report a nine-month-old boy who was admitted with vomiting, diarrhea and mild fever for 3 days, with one bout of passage of scanty blood-mixed stool prior to admission. Stool culture grew *Campylobacter jejuni*, and he was discharged after 40 hours of intravenous and oral rehydration. Initial blood tests revealed hemoglobin of 10.7 g/dL; white cell counts $8.5 \times 10^3/\mu\text{L}$; and platelets $240 \times 10^3/\mu\text{L}$. Urea and electrolytes were normal.

He returned to pediatric emergency after five days of discharge with history of letharginess and progressive pallor. There was no history of further bleeding from any site or any drug intake. He was pale on examination. Repeat blood counts revealed hemoglobin of 7 g/dL, total leucocyte count of $3.12 \times 10^3/\mu\text{L}$, platelet count of $40 \times 10^3/\mu\text{L}$, and reticulocyte Index of 3.5%. Peripheral blood smear showed normocytic normochromic anemia with no evidence of blast cells. Lactate dehydrogenase, autoimmune profile, liver function tests, and vitamin B12 and folate levels were normal. Ultrasound of the abdomen, and chest X-ray were normal. Bone marrow was hypercellular with erythroid hyperplasia and few megakaryocytes; cytogenetic profile was normal. He received one unit of red cell transfusion and expectant management were followed. Blood cell counts fully normalized after five weeks of conservative management. He is doing well at one year follow-up.

C. jejuni presents with self-limited diarrhea, vomiting, abdominal pain and mild fever, usually resolving in a week. Gastrointestinal bleeding, pancreatitis, meningitis, demyelinating encephalomyelitis, Guillain Barre Syndrome, endocarditis, osteomyelitis and arthritis have been reported to occur following campylobacter infections [1]. Various viral and

some bacterial infections have been reported in past to cause transient pancytopenia due to activation of T cell mechanisms [2,3]. The invasive potential of campylobacter may lead to major systemic complications, usually in immunocompromised patients or in patients at extremes of ages [4,5]. Though our patient was not immunocompromised but relative immune non-competitiveness is always a possibility in a very young infant. We pursued conservative management after a single red cell transfusion as bone marrow regeneration process reinstated normal full blood counts in five weeks.

We conclude that *C. jejuni* infection can cause systemic complications, including pancytopenia, in young infants, and clinicians need to be aware of this possibility.

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REFERENCES

1. Allos BM. Campylobacter jejuni infections: update on emerging issues and trends. Clin Infect Dis. 2001;32: 1201-6.
2. Wu J, Cheng YF, Zhang LP, Liu GL, Lu AD, Jia YP, Wang B. Clinical features and etiological spectrum in children with pancytopenia. Zhongguo Dang Dai Er Ke Za Zhi. 2011;13: 718-21.
3. Makheja KD, Maheshwari BK, Arain S, Kumar S, Kumari S, Vikash. The common causes leading to pancytopenia in patients presenting to tertiary care hospital. Pak J Med Sci. 2013;29:1108-11.
4. Nielsen H, Hansen KK, Gradel KO, Kristensen B, Ejlersen T, Østergaard C, *et al.* Bacteraemia as a result of Campylobacter species: a population-based study of epidemiology and clinical risk factors. Clin Microbiol Infect. 2010;16:57-61.
5. Pacanowski J, Lalande V, Lacombe K, Boudraa C, Lesprit P, Legrand P, *et al.* CAMPYL Study Group. Campylobacter bacteremia: clinical features and factors associated with fatal outcome. Clin Infect Dis. 2008;47:790-6.