ORIGINAL RESEARCH PAPER

General Medicine

SALMONELLA PARATYPHI ENDOCARDITIS WITH SPLENIC ABSCESS

KEY WORDS:

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ABSTRACT

Infective endocarditis is rarely caused by salmonella. This is a case report where salmonella paratyphi was isolated from the blood of a patient with echocardiographically documented mitral valve disease and endocarditis. The patient was treated with ceftriaxone [2g/ day] for 6 weeks and he made a complete recovery.

INTRODUCTION

Salmonella infection has been associated with cardiac involvement. Endocarditis is very rare in salmonella infection but myocarditis occurs in 1-5 % cases[1.] It occurs usually during or after a concomitant infection like gastroenteritis in predisposed individuals like individuals with underlying heart disease who have prosthetic valves (15%), congenital heart disease (5%) and less frequently in patients with other valvular abnormalities and HIV patients [2]. we report a case of 30-year-old male patient with an echocardiographically documented mitral valve endocarditis with vegetations.

Case Report

A 30-year-old man was admitted with fever generalized body pain lasting for two weeks with associated headache for 7 days and altered sensorium for last 5 days. No associated vomiting loose stools chest pain cough, no history of any body rash, insect bite, seizures, no history of recent travel. On examination he was febrile moderately built and nourished with maintained consciousness with no orientation to time place or person having tachycardia and a normal blood pressure. cardiovascular examination revealed a grade 3 mid systolic murmur best heard in mitral area with radiation to base of heart with an associated ejection click with more prominence on standing. Investigations revealed normal accounts with raised CRP, CSF study was normal. ECHO showed an echogenic mass with increased mobility attached to anterior mitral leaflet with an associated MVP with an eccentric MR. USG abdomen showed multiple heteroechoic areas with ill-defined margins suggestive of a splenic abscess, a CECT confirmed the existence of a splenic abscess. Blood culture yielded salmonella paratyphi A sensitive to ceftriaxone ampicillin and cotrimoxazole. Hence a diagnosis of infective endocarditis was made based on DUKES criteria[3]. Patient was treated with ceftriaxone [2 g/ day] for 6 weeks. Splenic abscess was managed conservatively as abscess size kept on decreasing progressively. Review echo after 6 weeks showed no residual vegetations, MVP with mild MR.

DISCUSSION

Endocarditis in its narrowest sense refers to exudative and proliferative inflammatory alterations of the inner lining of heart[4] . Endocarditis caused by salmonella typhi is very rare, accounting only for 1.3–4.8% of cases[5-7]. Bacteremia and metastatic infections are most common with salmonella choleraesuis and salmonella Dublin. Endocarditis and arteritis are rare but are associated with potentially fatal complications including valve perforation, endomyocardial abscess, pericarditis, mycotic aneurysm, aneurysm rupture and vertebral osteomyelitis. Treatment is with intravenous beta lactam antibiotic such as ceftriaxone or ampicillin.

REFERENCES

1. Kamili MA, Gazanfer A, Samia R, *et al*. Salmonella infection mimicking acute rheumatic fever. J Assoc Physicians India 1996;44:579–80.
2. Rodriguez C, Olcoz MT, Izquierdo G, Moreno S. Endocarditis due to ampicillin-resistant nontyphoid *Salmonella*: Cure with a third-generation cephalosporin. Rev Infect Dis 1990;12:817-9
3. Kaye D. Infective endocarditis. In: Fauci AS, Martin JB, Braunwald E, eds. *Harrison's principles of internal medicine*, 14th ed. New York: Mc Graw Hill, 1998:785–91.
4. Ari, R, Harvey, w.p and Hufnagel, C.A a Am. Heart J . 50 153, 1955
5. Durack DT. Infective and non-infective endocarditis. In: Hurst JW, Logue RB, Rackley CE, *et al*, eds. *The heart*, 5th ed. New York: Mc Graw Hill, 1998:1250–77.
6. Wynne J, Braunwald E. The cardiomyopathies and myocarditis. Toxic, chemical and physical damage to the heart. In: Braunwald E, ed. *Heart disease—a text book of cardiovascular medicine*, 4th ed. Philadelphia: WB Saunders Company, 1992:1394–450.
7. Gribbin B, Crook WM. Infective endocarditis. In: Weatheral DJ, Ledingham JGG, Warrel DA, eds. *Oxford text book of medicine*, 3rd ed. Oxford: Oxford University Press, 1996:2436–51.