CASE REPORT

Salmonella typhi endocarditis: a case report

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Salmonella are a rare cause of infective endocarditis. This report describes a case where Salmonella typhi was isolated from the blood and urine of a patient with echocardiographically documented aortic valve disease and endocarditis. The patient was treated with two weeks of ceftriaxone (3 g/day) and amikacin (15 mg/kg/day), followed by a further two weeks of ceftriaxone (3 g/day) alone. He made a complete recovery.

Cardiac involvement associated with salmonella infection has been recognised for several years. Myocarditis occurs in 1–5% of cases and endocarditis is very rare. Approximately 75% of cases have an underlying cardiac abnormality, such as rheumatic heart disease and congenital heart defects. We report the case of a 25 year old man with echocardiographic evidence of aortic valve disease and vegetations. Only a few cases have been reported from India, and ours is the first case reported from Jammu and Kashmir State.

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DISCUSSION

Infective endocarditis usually occurs in the setting of an existing valvular abnormality and Salmonella typhi as the cause of endocarditis is very rare, accounting for 1.3–4.8% of cases. Salmonella have a predilection for the valves, and atrial thrombus formation, myocarditis, and pericarditis are the usual complications in cases of salmonella endocarditis. However, such complications, which are associated with a bad prognosis, were not seen in our patient.

Salmonella serotypes commonly known to cause endocarditis include S. choleraesuis, S. typhimurium, and S. enteritidis, and infrequently the S. Thompson and S. derby serotypes. In addition, S. typhi has been reported previously as a cause of endocarditis. Hewage and colleagues' reported the first case from Sri Lanka, and Du Plessis et al reported a case of right sided endocarditis with tricuspid regurgitation. Tongia and Chowdhury reported a case in a 24 year old Egyptian woman known to have rheumatic heart disease, and a further three patients were reported by Mokhobo, one of which developed cardiac rhythm disturbance. Infection of the endocardium with multi-drug resistant salmonella is associated with a poor prognosis; however, our patient made an uneventful recovery after treatment with ceftriaxone and amikacin. Ceftriaxone is the drug of choice for salmonellosis and is given at a dose of 2–6 g/day.

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Take home messages

- We describe a rare case where Salmonella typhi was isolated from the blood and urine of a patient with echocardiographically documented aortic valve disease and endocarditis
- The patient was treated with two weeks of ceftriaxone and amikacin, followed by a further two weeks of ceftriaxone alone, and made a complete recovery
REFERENCES