A Fatal Case of Non-typhoidal Salmonella Pyogenic Pericardial Effusion in an Immunocompetent Adolescent

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Abstract

Salmonella is divided into classical Typhoid and Non-typhoidal serotype (NTS). It is transmitted via fecal oral route. Pericardium involvement in salmonellosis is estimated to be less than 2% of all cases and has mortality rate as high as 50%. 70% of pericarditis cases were identified to be immunosuppressed. Herein, we report a fatal case of non-typhoidal salmonella pyogenic pericardial effusion in an immunocompetent adolescent. A 16-years-old boy was referred for CXR finding suggestive of pericardial effusion. He had prolonged cough for 8 months duration, associated with breathlessness and failure symptoms. He had intermittent fever but denied gastrointestinal symptom. Examination revealed signs in consistent with Beck’s triad. Transthoracic echocardiography showed massive effusion and loculations with tamponade effect. Subsequent pericardial fluid culture yielded S enteritidis. He underwent pericardialcentesis twice and antibiotic therapy (augmentin, ceftriaxone, ciprofloxacin and meropenam) for 3 weeks. His condition continued to deteriorate and succumbed to death on third week of admission. Salmonella pyogenic pericardial effusion often presents with non-specific cardiac or pulmonic symptomatology and diagnosis often delayed. Echocardiography remained the best tool in confirming pericardial effusion. Pericardialcentesis is vital as organism often detected in pericardial fluid. Salmonella Enteritidis is the commonest organism. Aggressive treatment is crucial. Combination of antibiotic and surgical drainage is the preferred method. Pyogenic non-typhoidal Salmonella pericardial effusion is a rare but deadly disease. Aggressive combination treatment with antibiotic and surgical drainage may improve outcome.

Keywords: Non-typhoidal Salmonella, Pericarditis, Pericardial Effusion, Salmonella Enteritidis

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