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SCIENTIFIC LETTER

Tuberculous Dilated Cardiomyopathy with Myocarditis

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To the Editor: Tuberculous involvement of heart occurs in 1–2% cases and involvement of myocardium is rarer [1]. Antemortem diagnosis is delayed due to its low incidence and late diagnosis. Most of the cases occur in young age in immunocompetent males [2].

We report a rare presentation of tuberculosis in a 5-y-old girl child, who presented with fever and anasarca for 2 mo, shortness of breath, abdominal distension and cough for 2 wk. The child was born at term, immunized for age and developmentally normal. She was febrile with pulse 140/min, blood pressure 90/60 mmHg, respiratory rate 38/min and SPO_2 90%. Examination revealed generalised lymphadenopathy, bilateral basal crepts, muffled S1, S2, ascites and massive hepatomegaly. Chest radiograph showed enlarged cardiothoracic ratio with interstitial edema. Fine needle aspiration cytology (FNAC) of cervical lymph node showed necrosis and Zeihl Neelson stain was positive. A diagnosis of tuberculosis was given and child started on DOTS category I. Echocardiography showed dilated cardiomyopathy, moderate left ventricular dysfunction with ejection fraction 30%, mild pericardial effusion and Congestive heart failure- New York Heart Association Classification (CHF-NYHA) Grade III. Creatine kinase (CK-MB) was raised (49 IU), so a final diagnosis of cardiomyopathy with tubercular myocarditis was made. Child improved on anti-tubercular treatment (ATT) and decongestive measures.

The incidence of tuberculosis is declining worldwide, however, it is still one of the most prevalent infectious etiologies. Tuberculosis usually spares the heart. The proposed mechanisms of cardiac involvement are hematogenous or lymphatic spread or involvement from adjacent structures [3].

Myocardial involvement, if not diagnosed early, is associated with a high mortality rate upto 30% [1, 4]. There are reports of postmortem diagnosis of tubercular cardiomyopathy, with relatively few cases reported antemortem [5]. This is due to its low incidence, insidious onset and progression, leading to late diagnosis [2]. In a clinically suspected case, when the diagnosis of tuberculosis is confirmed, endocardial biopsy may not be necessary [5].

There is a need to be aware of such unusual presentations to prevent misdiagnosis or delay, which may prove fatal. Early treatment is important in these cases. Appropriate investigations should be done in these cases before considering endocardial biopsy.

Compliance with Ethical Standards

Conflict of Interest None.

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