

## **A rare presentation of T cell acute lymphoblastic leukaemia**

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**Introduction:** T cell acute lymphoblastic leukaemia comprises 15% of childhood acute lymphoblastic leukaemia and commonly presents with a high white cell count, large mediastinal mass, hepatosplenomegaly and lymphadenopathy. Pleural effusions are common but pericardial effusion with cardiac tamponade is a rare presentation.

**Case report:** A fourteen year old previously healthy boy presented with progressive shortness of breath for two days. Basic investigations were done. Full blood count and blood picture appearances were compatible with acute leukaemia and this was further confirmed as T cell acute lymphoblastic leukaemia following bone marrow examination and immunophenotyping. Chest X ray showed moderate right pleural effusion and echocardiogram revealed cardiomegaly, massive pericardial effusion with impending cardiac tamponade. Pericardiocentesis was performed by the cardiothoracic surgeon and a pigtail catheter was placed in situ. Patient became haemodynamically stable following the procedure. Analysis of the pericardial and pleural fluid showed leukaemic infiltration. Subsequently chemotherapy was initiated. During the course of the disease he developed an isolated central nervous system relapse with blindness. The patient was switched over to a more aggressive chemotherapy regimen and currently he is doing well with gradual improvement of vision.

**Discussion:** T cell acute lymphoblastic leukaemia is generally considered an aggressive disease and the patients have an increased risk of induction failure, early relapse and isolated central nervous system relapse. Massive pericardial effusion with cardiac tamponade is a rare initial presentation of T cell acute lymphoblastic leukaemia and it is a life threatening condition which needs urgent intervention.

