Intrathoracic extramedullary hematopoiesis related spontaneous hemothorax

A 39-year-old man had the history of β-thalassemia intermedia and had undergone splenectomy in his childhood. Intrathoracic extramedullary hematopoiesis (EMH) mass was noted on routine follow-up image (Figure 1a). One day, he suffered from acute onset of right upper back pain with dyspnea. He was then sent to our emergency department, and the chest plain film revealed massive right pleural effusion. Computed tomography (CT) examination showed suspicious ruptured intrathoracic EMH mass, which complicated with massive pleural effusion (Figure 1b). Further chest tube insertion was conducted to relieve the massive hemothorax. The subsequent thoracoscopy proved the diagnosis.

To compensate chronic anemia, EMH can sometimes be noted in patients with thalassemia. The EMH most frequently involves the liver, spleen and lymph nodes, intrathoracic manifestation is very uncommon. EMH-related hemothorax, as in our case, is even rare and fatal. Intensive care with fluid resuscitation and surgical decompression should be initiated without delay in such cases. Radiation therapy is the adequate therapy to prevent recurrent hemothorax.1,2

References