

中文題目：腎移植後的患者發生結核性心包膜炎及乳糜胸- 一案例報告

英文題目：Tuberculous Pericarditis and Chylothorax in Renal Transplant Recipient: A Case Report

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Background : Tuberculosis remains a major problem in Taiwan, a country with high prevalence of tuberculosis. Patients receiving immunosuppressive therapy take higher risk of developing tuberculosis. We report a case of a renal transplant recipient with chylothorax and pericardial effusion, which lead to the diagnosis of tuberculosis.

Case report : A 24-year-old man developed progressive dyspnea on exertion for 5 days and intermittent fever for 2 weeks. He had received a living-kidney transplant 3 years ago because of end-stage renal disease by IgA nephropathy. The patient received maintenance immunosuppressants with oral mycophenolate mofetil (750mg twice a day), tacrolimus (3mg twice a day) and prednisolone (5mg per day). During this period, left inguinal and submental lymphadenopathy and night sweats have ever been noted. Physical examination showed afebrile, heart rate of 111 beats per minutes, respiratory rate of 18 breaths per min, and blood pressure of 134/90 mmHg. Breath sound was decreased with reduced expansion and a dull percussion on right side of the chest. His white blood cell count was 7780 cells per μ L with neutrophils of 71%, lymphocytes of 15% and monocytes of 13% and a raised C-reactive protein concentration of 7.09 mg/dL. Radiography showed right side pleural effusion and cardiomegaly. A chest drain was inserted, draining white-yellow creamy fluid of about 1L a day. Pleural effusion analysis showed protein concentration of 5.6 g/dL, LDH of 139 U/L, sugar of 122 mg/dL, and triglyceride of 596 mg/dL. No organism was found on stain and culture.

A diagnosis of chylothorax was made by typical laboratory tests and clinical presentation. Non-contrast chest CT scan showed infiltrative soft tissue mass at anterior mediastinum, massive pericardial effusion and right side pleural effusion. Hypotension and pulsus paradoxus were found and pericardiocentesis was done for cardiac tamponade. Chest surgeon performed video-assisted thoracoscopic biopsy of the mediastinal soft tissue and pericardium, and created a pericardial window to relieve pericardial effusion. Pathology revealed suppurative inflammation, granuloma and acid fast bacilli. Pericardial fluid culture grew mycobacterium tuberculosis. Following the use of anti-tuberculous therapy, his symptoms resolved after 2 months, during which he needed another aspiration of chylothorax.

Discussion : Diagnosis of chylothorax is based on high triglyceride level of more than 110mg/dL in a white creamy pleural effusion. The etiology includes thoracic duct damage, malignancy, sarcoidosis, tuberculosis, cardiac failure, as well as surgery. Treatment of chylothorax is based on the etiology. Moreover, high protein, low fat diet supplemented with medium-chain triglyceride is beneficial.

Tuberculous pericarditis is a dangerous but difficult to diagnosed complication of tuberculosis, accounting for 1-2% of all pulmonary tuberculosis. It is usually caused by extension of adjacent infected tissues or by hematogenous spread from primary infection focus. Nonspecific manifestations including fever, weight loss and night sweats generally precede cardiopulmonary complaints such as cough, dyspnea, chest pain, pleurisy, and orthopnea. Cardiac tamponade occurs in 1.2% of pericarditis. Tuberculous pericarditis should not be missed in patients with immunocompromised status, from TB endemic area, high HIV prevalent area or with pericarditis of a non-self-limited course. Pericardial fluid culture, lymph node and pericardial biopsy are usually necessary to make the diagnosis. In addition to anti-tuberculous therapy, steroid could be considered for patients with or at risk of constrictive pericarditis.

Conclusion : Extrapulmonary tuberculosis, such as tuberculous pericardial effusion, can be elusive, necessitating a high index of suspicion. Early identification and management should be undertaken to avoid life-threatening consequence.