

中文題目：以昏厥及心包積液來表現之橋本氏甲狀腺炎 - 個案報告

英文題目：Hashimoto's thyroiditis presented as pericardial effusion and syncope – A case report

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**Introduction:** The etiology of pericardial effusion included infection, hypothyroidism, uremia, aortic or coronary artery dissection, malignancy, autoimmune disease, and trauma. The clinical presentation is variable, it may be asymptomatic, iatrogenic, or dyspnea, syncope, chest pain, and shock in severe cases. Cardiac tamponade may be found in patients with large or rapid accumulation or pericardial effusion. Pericardial effusion is just a clinical presentation; the cause of pericardial effusion was more important and necessary for further management. Diagnostic and therapeutic pericardiocentesis is sometimes very helpful in diagnosis. We would like to present a case that experienced pericardial effusion and syncope caused by hypothyroidism and diagnosed as Hashimoto's thyroiditis finally.

**Case report:** This is a 66-year-old woman denied any systemic disease who experienced syncope and fell down from motorcycle without hit anything or being hit by other people. Left chest and shoulder contusion injury was found and chest pain and shoulder pain after traffic accident was told. She was brought to our ER and initial vital signs were stable and consciousness was clear. Initial lab data showed mild anemia with Hb 9.8g/dl and K: 3.4mmol/l. CXR showed fracture over left 2<sup>nd</sup> and 3<sup>rd</sup> ribs and left clavicle, and water-bottle shape cardiomegaly was also noted. Chest CT showed no pneumothorax or hemothorax but obvious pericardial effusion was noted. She was admitted for further management.

After admission, physical examination showed mild thyroid enlargement and echocardiography showed moderate amount pericardial effusion with mild tamponade sign. Diagnostic and therapeutic pericardiocentesis was performed and 378ml yellowish clear fluid was aspirated out from drainage catheter. Effusion analysis showed negative Revalta test, RBC: 320/ul, WBC: 28/ul, cytology: negative for malignant cells. Cell analysis showed benign large amount of mesothelial cells & histiocytes admixed with small amount of acute and chronic inflammatory cells. Further examination showed hypothyroidism: T3 only 0.21 (normal range: 0.87-1.78) and T4 just 0.12 (normal range 6.09-12.23), TSH>100000  $\mu$  IU/ml. Anti-thyroid peroxidase antibody, thyroglobulin, and anti-TSH receptors were checked and elevated levels of anti-thyroid peroxidase antibodies was noted. Hashimoto's thyroiditis was diagnosed and thyroxin was prescribed. The patient was discharged after surgical intervention of left clavicle.

**Discussion:** The etiology of pericardial effusion included of infection, autoimmune disease, malignancy, uremia, and aortic dissection extending into the pericardium. However, hypothyroidism should also be considered. Non-specific symptoms such as general weakness or syncope may occur in patients with hypothyroidism, especially concurrent pericardial effusion complicated with tamponade exist. The classification of hypothyroidism included primary (thyroid dysfunction),

secondary (pituitary dysfunction), and tertiary (hypothalamus dysfunction). In our patient, primary hypothyroidism was diagnosed because of high TSH level with low T4, and Hashimoto's thyroiditis was diagnosed.

**Conclusion:** Through this thinking process in diagnosing this patient, we understood the importance of history taking and image reading, even in patient who visit your OPD just because of falling down accidentally. From left clavicle deformity to chest film, and from pericardial effusion to Hashimoto's thyroiditis, we found the actual cause of falling down cautiously. Instead of an accident, we believed that the episode of falling down from motorcycle was a result of disease presentation !