中文題目:胸鎖關節肺外結核-病例報告

英文題目: Extrapulmonary Tuberculosis in the Sternoclavicular Joint-A Case Report

作 者: 鄭至宏<sup>1</sup>, 蔡英明<sup>1,2,3,4</sup>, 林尚儀<sup>1,4,5</sup>, 楊志仁<sup>1,3,4,6</sup>

服務單位:高雄醫學大學附設醫院內科部<sup>1</sup>,高雄醫學大學醫研所,<sup>2</sup>高雄醫學大學附設醫院胸腔科<sup>3</sup>,

市立大同醫院4,高雄醫學大學附設醫院感染科5,高雄醫學大學醫學院醫學系6

## **Background:**

Tuberculosis is a relatively common infectious disease in Taiwan. Skeletal tuberculosis (TB), involving bones and/or joints, accounts for 10 to 35 percent of cases of extrapulmonary tuberculosis. Commonly, it involves spine (as Pott's disease), peripheral joints such as hips and knees, etc. Rarely, the involvement of sternoclavicular joint is reported. For its scarcity, we reported a patient with renal failure suffered from progressive painless swelling over right sternoclavicular joint. The final diagnosis proved to be a case of tuberculous arthritis. He was treated with 4-drug regimen without major side effects. It reminds us that despite its scarcity, TB sternoclavicular arthritis should be a big concern in patients with immunocompromised status.

## Case report:

A 76-year-old male with medical history of type 2 diabetes mellitus, and end stage renal disease under hemodialysis presented to our emergency department with low grade fever for days. He stated he had right sternoclavicular joint progressive swelling but without pain since 2 weeks ago. The Chest CT revealed an expansive osteolytic mass at the right sternoclavicular joint extending into the chest cavity. Surgical excision specimen revealed positive acid-fast stain (1-9 AFB/100 Fields, 1000X) and caseous necrosis. The pathologic diagnosis was granulomatous inflammation with mycobacterial infection of the soft tissue tumor and osteonecrosis with chronic inflammation of the proximal clavicle bone. The M. tuberculosis polymerase chain reaction test was positive. The final culture yielded Mycobacterium tuberculosis complex, all sensitive.

## **Discussion:**

Tuberculosis infection is an epidemic disease worldwide. In Taiwan, more than 10,000 cases of tuberculosis infection are reported annually. In this case, a painless joint swelling finally proven to be tuberculous arthritis raised the concern of its existence. It reminds us when encountering a painless joint swelling, tuberculous infection should be always listed on table of differential diagnoses.

Joint infection, as septic arthritis, is presented as swelling of joint. Commonly, it comes with fever, tenderness and local heat. It usually occurs in diabetic patients, intravenous drug abusers, and immunocompromised patients. In this case, his cardiac sonography did not suggest infectious endocarditis nor his serum test for HIV screen test implied its infection. Joint excisional biopsy revealed caseous necrosis, aggregated giant cells, and existence of acid fast bacilli. He was proven to be a rare case of tuberculous sternoclavicular arthritis.