

## January 2013 Pulmonary Journal Club

**Kartalija M, Ovrutsky AR, Bryan CL, Pott GB, Fantuzzi G, Thomas J, Strand MJ, Bai X, Ramamoorthy P, Rothman MS, Nagabhushanam V, McDermott M, Levin AR, Frazer-Abel A, Giclas PC, Korner J, Iseman MD, Shapiro L, Chan ED. Patients with nontuberculous mycobacterial lung disease exhibit unique body and immune phenotypes. Am J Respir Crit Care Med. 2013;187(2):197-205.**

Among patients with nontuberculous mycobacterial (NTM) lung disease is a subset of previously healthy women with a slender body morphotype, often with scoliosis and/or pectus excavatum. The authors enrolled 103 patients with NTM and 101 uninfected control subjects of similar demographics. Patients with NTM had significantly lower body mass index and body fat and were significantly taller than control subjects. Scoliosis, pectus excavatum and gastroesophageal reflux were significantly more prevalent in patients with NTM. The normal relationships between the adipokines and body fat were lost and IFN-g and IL-10 levels were significantly suppressed in stimulated whole blood of patients with NTM.

The description in this article extends the description of the “Lady Windermere syndrome” first described in the early 1990’s by Reich and Johnson (1). They described 6 elderly women who were immunocompetent, had no significant smoking history or underlying pulmonary disease, and developed *Mycobacterium avium* complex (MAC). They hypothesized that these women could have had the habit of voluntary suppression of cough, responsible for the inability to clear secretions from the lung. However, it is now known that the adipoproteins have immunomodulatory functions and the findings suggest that the underlying pathophysiology may be an immune deficit.

**Søyseth V, Bhatnagar R, Holmedahl NH, Neukamm A, Høiseth AD, Hagve TA, Einvik G, Omland T. Acute exacerbation of COPD is associated with fourfold elevation of cardiac troponin T. Heart. 2013;99(2):122-6.**

The authors investigated if acute exacerbation of chronic obstructive pulmonary disease (AECOPD) is associated with myocardial injury, expressed as elevated cardiac troponin T (Trop). In a cross-sectional study, Trop in patients hospitalized for AECOPD were compared with COPD patients in their stable state. Mean Trop were elevated in the AECOPD group (25.8 ng/l) compared to the reference group (4.55 ng/l). Higher Trop were associated with the presence of pathological q-waves ( $p=0.012$ ) and electrocardiographic left ventricular hypertrophy ( $p=0.039$ ), long-term oxygen treatment ( $p=0.002$ ) and decreasing forced expiratory volume in 1 s ( $p=0.014$ ).

Slight elevations of Troponin in patients admitted to the hospital are common, including AECOPD patients. This study suggests that elevated Troponin do not necessarily indicate underlying cardiac disease and that cardiac consultation and/or workup is not necessarily indicated in every AECOPD patient with a slight elevation in Troponin. Clinical judgment as to whether a cardiac condition coexists with the AECOPD must be used.

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### ***References***

1. Reich JM, Johnson RE. Mycobacterium avium complex pulmonary infection presenting as isolated lingular or middle lobe pattern: the lady Windermere Syndrome. Chest 1992;101:1605-9.