

**THE LOW TRIIODOTHYROXIN SYNDROME IMPLIES HIGH POSSIBILITY OF MORTALITY IN RESPIRATORY FAILED CARDIOVASCULAR COMPROMISED PATIENTS**

Kuangyu Chen MD, Ming-Jhieh. Chang, MD, Chih-Wei. Kuo, MD and Hong-Chia. Chen; Dep. Of Pul. And Critical Care Medicines, Lo-Tung Pohai Hospital. Taiwan

**BACKGROUND:** To evaluate the possibility of mechanical ventilator dependence of patients with low triiodothyroxin syndrome (LT3S), a clinical correctable factor.

**METHODS:** Group cases report during Dec. 2004 to Jul. 2006. T3, free T4 and TSH normal limit are 0.97-1.69 pmol/L, 0.78-2.19 and 0.465-4.68 respectively.

**RESULTS:** There are 10 cases with low serum triiodothyroxin enrolled for this study. Mean age is 79.1 years old. Cardiovascular co-morbidity are all noted. There are 4 cases diagnosed with atrial fibrillation and 3 cases with sick sinus syndrome. Most cases that developed an acute respiratory failure and that needed prolonged mechanical ventilation had the least possibility to wean from ventilators or (highest?) mortality after diagnosis without treatment. The all cases mean deficit difference between T3 to low normal limit is 0.302 pmol/L but to high normal limit is 1.022 pmol/L. Two patients received thyroxin treatment and recovered by chest image and successful weaning from invasive mechanical ventilation.

**CONCLUSIONS:** LT3S might be an independent factor for one-year outcome in respiratory insufficient senile patients who are cardiovascular compromised. Low doses thyroxin might be helpful in such patients with 1.0 pmol/L T3 deficit at the high normal limit.

Keyword: Endobronchial metastasis, Breast cancer, Bronchoscopy