

中文題目：極端肥胖年輕宅男呼吸道併心血管重症診治之窘境與轉折成功；方興未艾社會現象：一個罕見的病例報告

英文題目：Challenges about febrile, hypoxemia and hemotysis morbidly obese indoorsman to perplex for diagnose and give treatment: a tough question

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### **CASE REPORT – Challenges about febrile, hypoxemia and hemoptysis morbidly obese indoorsman to perplex for diagnose and give treatment: a tough question**

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#### **ABSTRACT**

Morbid obesity could cause severe respiratory illness and diagnosis embarrassment. We report management a morbidly obese lady of BMI 42 kg/m<sup>2</sup> with fever and for 7 days. For patient safety consideration , he stayed in ICU for days

**Key words:** Morbidly obese; D-Dimer , BMI; Pulmonary embolism, CT , cardiacechography

#### **INTRODUCTION**

Hypoxemia and hemoptysis make tremendous challenges in obese patients. I describe how we successfully treat a morbidly obese youth of BMI 42 kg/m<sup>2</sup> with hypertension for years and his ICU stay was dispute and controversial issue; disparity among different field medical specialist to be entirely different opinions from between differential diagnosis between respiratory infectious disease and superimpose with cardiovascular thromboembolism became very difficultly without further image study assistance .But we still perfectly to dispose of him from straitened circumstances

#### **CASE REPORT**

A 38 years old gentleman came for help in chest clinics as for fever ,short of breath. He presented with complaints to spit blood and dyspneic at last 3 days. He was known to have hypertension for many years. Important clinical findings were as follows; The young man had a weight of 242kg,height of 182 cm and BMI 73kg/m<sup>2</sup>. He was dyspneic on room air; SPO<sub>2</sub> 88%.Blood pressure was 146/89 mmHg, Body temperature was 38.5C. Laboratory investigations revealed leukocytosis (WBC 18500) elevated CRP:13.6 his serum creatinine 0.8 mg/dl and blood urea to be 8.0mg/dl. His blood gas analysis was PH 7.383 PCO<sub>2</sub> 52.1 PO<sub>2</sub>

54.3 HCO<sub>3</sub> 31.9 that meant mild respiratory acidosis with metabolic compensation. For pulmonary cardiovascular evaluation: Troponin-I; 0.02; NT-proBNP: 679.00, D-Dimer: 837.59; PT 13.2; APTT; PCT: 0060

On chest auscultation breath sound were reduced on both side.

ECG showed sinus tachycardia

.His chest x-ray revealed bil lateral whole lung infiltration.

It was planned to conduct Helical CT and Nuclear medicine :ventilation perfusion scan combined with exclusion of pulmonary thromboembolism. But he was too big for the gantry ?We could check his girth the table move for he was not so stable for conveying and his trunk width all were over gantry and his body weight also exceed to weight load bearing. After giving furosemide 4mg IV drip per 8 hours for 3 days combined with parenteral 3<sup>rd</sup> generation cephalosporin and levofloxacin also was given slowly. Immediately after those measures, the patient developed smoothly and fever and SOB subsided. His airway was secured with Venturi o<sub>2</sub> mask with FiO<sub>2</sub> 35%. After 3 days of intensive care the patient regained normal sinus rhythm and smooth respiration which was managed by antibiotics and diuretics infusion. The hazard was to ferry patient was transferred to general ward. In ward he was on schedule treatment and discharge 7 days later. No data suggest that any particular serum marker imply any thromboembolism illness in patients with obesity. Clinical prompts recommend focus on airway infectious urgent case rather than thromboembolism on the basis of serum marker as D-Dimer, PCT, CRP and Pro-BNP the results of clinical analysis. In order to reduce well as minimize the risk of anti coagulation therapy associated lung injury though other intensivists disclaim thromolytic therapy for his misery from possible pulmonary thromboembolism

We suggest the following 2 strategies:

- 1. To sieve out high risk patient by application with serum marker as D-Dimer, PCT, CRP to specific which requires according to specific subjects then high order image study such as CTA; nuclear medicine even PTCA were appropriately prescript**
- 2. Skillfully to explain such extreme obese sufferer about equipment height and girths limitation and no- diagnostic scan**

We were lucky to save the fortune's favorite through debating.

Attentive patience also persistent vigilance were the a weight-bearing point

to the key remedy.

## **Discussion**

Obesity has been associated with increased susceptibility to acute infections, including those of the lower respiratory tract. Obesity influence all about the control of the respiration, increases airway resistance increased work of breathing, impaired

respiratory muscle function and blood gas exchange, increases the chance of aspiration, Wei Nie et al.<sup>1</sup> found a paradox relationship between BMI and pneumonia mortality. Our solitary case reports for the definition of pneumonia and its

comorbidity also were important for these sickness groups. Alternate explanations for our findings include the possibility that overweight and obese persons may have more comorbidities (e.g. varicose vein and hypertensive cardiovascular disease). Some studies have suggested that the high prevalence of pronounced disability, comorbidities, and symptoms in obese individuals motivates physicians to intervene in these patients at earlier stages of conditions such as thromboembolism disease.<sup>2</sup>

For reasons of equipment breakage/failure as CT scanner, the nuclear medicine exam table, limited Echocardiography window, all above restrictions confine our manipulation measures in affirm accurate diagnosis.

Nevertheless, our results together with those of conventional impressions suggest that obesity may have multidimensional display from bacterial pneumonia acquired in the community or thromboembolism disease. Without questioning the effects of obesity in the chronic health of people, deserve contemplation over every systemic illness.

1 Obesity survival paradox in pneumonia: a meta-analysis Wei Nie; Yi Zhang; Sun Ha Jee; Keum Ji Jung; Bing Li; Qingyu Xiu BMC Medicine;2014, Vol. 12 Issue 1, p1

2 The obesity paradox in community-acquired bacterial pneumonia.

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