中文題目:一位糖尿病酮酸血症女性腸阻塞於電腦斷層影像類似缺血性腸病變併發細菌性肺栓塞—案例報告

英文題目:Intestinal obstruction CT scan image in a diabetic woman with septic pulmonary embolism mimic ischemic bowel disease—A case report

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Background:

Septic pulmonary embolism(SPE) is an uncommon disorder with insidious onset of clinical course such as fever, cough and opacity in Chest film. An active extra-pulmonary infective focus could be found in most cases. Here we report a case of intestinal obstruction with impending ischemic bowel disease presented with SPE that was successfully treated with simple lysis of intestinal adhesion band and long course broad spectrum antibiotics for an unknown infection focus and microorganism.

Material and methods & Results:

A 54-year-old female had positive hepatitis C antibody and type 2 diabetes mellitus with irregular control at clinic. She discharged from one medical center with the alleged diagnosis of HHS three months ago. She still favored heavy meals after that event. In recent two weeks, she complained of abdominal pain and upper respiratory tract symptoms. She did not call a doctor for help. She was sent to Matou Sin-Lau hospital due to change of consciousness this morning. Under the impression of DM with DKA and HHS, severe metabolic acidosis with leukocytosis, she was transferred to Tainan Sin-Lau Hospital for further intensive care.

Physical examination revealed blood pressure: 104/49 mmHg, pulse rate: 112/min, body temperature: 34.5℃, GCS: E3V3M6, body weight: 27 Kg, 147 cm in height. Abdominal: no obvious peritoneal sign. Laboratory data showed arterial blood gas PH: 6.863(N:7.35-7.45), PO2: 111 mmHg, PCO2: 24 mmHg (N:32-45), and HCO3: 5.4 mmol/L(N:20-26), and leukocytosis white blood cell: 14400/μL(N:4800-10800) with left shift metamyelocyte: 2%, band form: 5%(N: -6%), segmnet: 77%(N:50-75), ketone body: 3+, serum osmolarity: 344 mOsm/Kg(N:275-295), urine routine: WBC: 0-1/HPF, RBC: 1-2/HPF, BUN: 16mg/dL(N:8-20), creatinine: 0.7mg/dL(N:0.6-1.3), Na: 144mmol/L(N:135-145), K: 2.2mmol/L(N:3.6-5), Cl: 118mmol/L(N:101-111), CK: 55U/L(N:38-174), CK-MB: 17.3U/L(N:2-14), amylase 585U/L (N:25-125), lipase: 26U/L(N:22-51), CRP: 222mg/L(N:0-10).

Next day(2010-11-13), abdominal tenderness debut. KUB revealed mild increased bowel gas pattern with some stool retention. Abdominal CT scan(without contrast) showed segmental small bowel thickening with pneumatosis intestinalis which was

compatible with ischemic bowel disease. Meanwhile, there are small lung infiltrations in both lung fields. Urgent Exploratory laparotomy was performed by general surgeon. A small adhesion band at right lower quadrant resulted in small bowel obstruction. A segment of small bowel showed mild ischemic change. Pneumatosis intestinalis(PI) was impressed. After cutting the adhesion band, we found color of intestine turned to be normal appearance. Endotracheal tube was removed next day.(2010-11-14) Try liquid diet 3rd day after operation.(2010-11-15) However, her condition did not improve smoothly with antibiotics ceftriaxone (Rocephin®) and metronidazol. Blood culture reports were negative but urine culture revealed K. pneumoniae which was sensitive to those antibiotic. 2010-11-16 she was transferred to ward.
6th day after operation(2010-11-18), persistent low grade fever 37.7℃ and low SaO2 were found. Fever work-up was done. Chest X-ray showed multiple pulmonary opacity nodules in both lung fields. Antibiotic was changed to Tienam®. Sputum culture report was Acinetobacter baumannii which was sensitive to this antibiotic. 2010-11-19 Chest CT scan revealed "compatible with septic lung appearance". Cardiac echogram did not find any vegetation over valves. Transesophageal echogram (TEE) was suggested. But patient refused. Transthoracic echogram (TTE) was repeated 6 weeks later and showed no evidence of vegetation. Body temperature decrease gradually from 38℃ to 37℃ and 36.6℃ after Tienam® 5 days and 7 days respectively. Because of intestinal obstruction induced septic pulmonary embolism, the patient received Tienam® for a full course of 21 days. Then, she discharged from hospital and followed up at OPD smoothly for 9 months.

Conclusion:

Culture-negative intestinal obstruction complicated with pneumatosis intestinalis and septic pulmonary embolism is rarely reported[1].
Early enteral feeding in critical patient to improve bowel movement may attenuate the severity and incidence of septic condition.
Earlier diagnosis, removal of insulting lesion, effective antibiotics and good supportive care could help patient recovery from their illness.