

## CASE 1998-07

Submitted by:

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### **Clinical History**

A 45-year-old woman with long-time, but stable, asthma presented with shortness of breath, cough and chest tightness. ABG showed severe acidosis and hypoxia. She was intubated and treated for status asthmaticus with IV steroids and theophylline. She then developed fever with a right perihilar infiltrate on chest X-ray and was given multiple antibiotics following a positive sputum culture for H. influenza and Staph. aureus. In subsequent days, her course was complicated by GI bleeding, tension pneumothorax, cardiomyopathy with EF of 25% and fluctuations in mental status, at times unresponsive. Ten days after admission, she was noted to be very weak on all 4 extremities. Neurological examination revealed diffuse weakness (graded 3-4 / 5 globally) with a normal sensory exam, and 2+ DTRs throughout except for absent ankle jerks. By 1/2/97 her weakness improved and she was able to walk with a walker.

Her family history was unremarkable. She's married with two children. She had a history of 15 pack years of smoking (none for 13 years). There was no EtOH use.

Her medication included antibiotics (Gentamycin, Timentin, Vancomycin, and Cipro), Solumedrol (>6000 mg total dose), Theophylline, Ativan and Versed PRN, Insulin, Pepcid, Capoten then Lisinopril, and Digoxin.

### **Lab data**

- 1) MRI C-spine - mild spondylosis, no spinal cord compression;
- 2) EEG - moderately severe encephalopathy
- 3) Normal head CT
- 4) Lumbar puncture - normal
- 5) EGD - mild gastritis and duodenitis
- 6) ECG - c/w an anteroseptal MI (normal CK-mb fraction)
- 7) CBC and electrolyte abnormalities which resolved prior to discharge
- 8) CK - 2,452.

She was discharged to rehabilitation 3 weeks later and was described as having "diffuse generalized weakness, both proximally and distally with substantial muscle wasting.....reflexes are not brisk, but seem to have improved from where they were recorded when she was admitted which would suggest some type of demyelinating polyneuropathy."

**A muscle biopsy was performed.**

**Material submitted:** 3 kodachrome slides labeled A (H&E), B (NADH) and C (EM photograph)

**Points for discussion:**

- a) Diagnosis
- b) Pathogenesis