中文題目:硬腦膜外膿腫模仿多發性肌炎

英文題目:Epidural abscess mimic polymyositis

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**Case report:** This 65-year-old male patient has suffered from lower back pain since 2014/07/02 with associated symptoms as fever, consciousness drowsy, poor intake, soreness of limbs, acute renal failure, urine retension and acute hepatitis with hyperbilirubinemia. The brian computed tomography (CT) scan showed no ICH or infarction. Lumbar puncture was failed. EEG showed regional fronto-parietal cortical dysfunction, might related to CNS infectious disease or metabolic derangement. Lumbar spine magnetic resonance imaging (MRI) reported left central L4-5, bilateral L5-S1 HIVD; mild central and left C4-5 HIVD; central C5-6 and right C6-7 HIVD; left C5-6 foraminal spurs formation. The complete blood count (CBC) showed leukocytosis. The erythrocyte sedimentation rate elevated (ESR) to 78 mm/hr. The C-reactive protein (CRP) level was elevated to 50.59 mg/dl. The serum creatine kinase (CK) levels are elevated to 1220 IU/L.

Proximal muscle weakness with muscle power 1` was found but EMG was negative finding. Leptospirosis, polymyositis, or adult onset still disease (AOSD) was suspected. Ceftriaxone, Doxycycline, Pendicillin G and fluconazole were prescribed. Neither hepatitis B nor C was detected. He still had fever off and on.

The chest to abdomen computed tomography (CT) scan showed right psoas muscle abscess. (figue1) The right psoas muscle abscess drainage is done smoothly. But, proximal muscle weakness, urine retension, low back pain, bilateral lower limb weakness, and body weight loss about 8kgs within one month were observed. There was no Gottron sign, Shawl sign, choking or elevated CK level. The spine lumbar MRI showed L4 and L5 osteomyelitis, L4-5 diskitis, L3 to S1 epidural abscess and bilateral iliopsoas abscesses, C1-2 epidural abscess and C1 to C4 prevertebral soft tissue infaction, and C5-6 moderate degree thecal sac narrowing. (figure2). The brain MRI showed C1-2 anterior epidural abscess with thecal sac compression, C1-C4 prevertebral soft tissue infection. (figure3) The patient underwent L4-5 discectomy and bone graft and C1 laminectomy and removal of epidural abscess on 2014-08-15. The blood culture showed Oxacillin-susceptible Staphylococcus aureus. The oxacillin for epidural abscess was continued.

He experienced improvement in muscle power gradually and he underwent rehabilitation program regularly.

## Disscussion:

Polymyositis is an idiopathic inflammatory myopathy characterized by the following symmetrical, proximal muscle weakness, elevated skeletal muscle enzyme levels, Complete blood count (CBC) may show leukocytosis or thrombocytosis; leukocytosis is present in more than 50% of patients. Erythrocyte sedimentation rate or C-reactive protein level - Elevated in 50% of patients with polymyositis Serum creatine kinase (CK) levels are usually elevated in persons with polymyositis, ranging from 5-50 times the reference range. But this patient serum creatine kinase (CK) levels elevated initially and became normal throughout course of the disease. The polymyositis was not suspected. The acute renal failure and acute hepatitis with hyperbilirubinemia due to sepsis with epidural abscess and psoas muscle abscess. The epidural abscess with spinal cord compression was suspected. He had dysphagia, proximal muscle weakness, urine retention, bilateral lower limb weakness. After laminectomy and removal of epidural abscess, he experienced improvement in muscle power gradually. The etiology of epidural abscess was hematologic spread, trauma, injection, or surgery. The patient has had acupuncture for back pain on 2014/07/01 and 2014/07/03. One cumulative review of 715 major complications of acupuncture revealed that infection was common (295, 41%). The most common infection is hepatitis B (>60%) due to transmission via needle puncture. There are only three cases of spinal infection (1.2.3). This patient did not have diabetes mellitus, liver cirrhosis, chronic kidney disease. Our patient was not immune-compromised. We think our patient's infection due to the acupuncture needle spreading a skin commensal into the deeper tissues.

## Figure 1





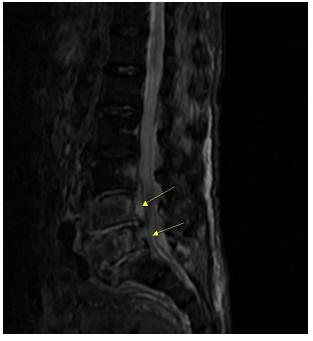


Figure 3



References:

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Vinesh Godhania Lumbar spine osteomyelitis and epidural abscess formation secondary to acupuncture.