

Retroperitoneal Abscess Complicated by Acupuncture : Case Report

With acupuncture treatment becoming an increasingly popular analgesic, there have been increasing reports on its associated complications. Although pneumothorax is the most frequently reported injury caused by acupuncture needles, infectious complications may not be uncommon. Most infectious complications show less serious clinical manifestations than pneumothorax, but retroperitoneal or intra-abdominal abscess caused by acupuncture may be much more serious conditions. We experienced a 56-yr-old male diabetic patient presenting with serious retroperitoneal abscess after acupuncture treatments. Emergency operative drainage with adequate antibiotic therapy was performed. Bacterial culture of blood and closed pus specimens recovered *Klebsiella pneumoniae*. In addition to application of better knowledge on anatomy, appropriate antiseptic practice by practitioners will reduce many serious complications associated with acupuncture.

Key Words : Acupuncture; Complications; Retroperitoneal Space; Abscess

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INTRODUCTION

Acupuncture has been generally regarded as a safe procedure in general population. However, there are a number of case reports of potentially serious adverse events attributed to acupuncture (1-5). Causation is sometimes difficult to determine beyond doubt. Case reports do not produce reliable data on the frequency of adverse events. In addition, patients who experience adverse events may be reluctant to attribute them to acupuncture because of their belief in its inherent safety. Pneumothorax is the most frequently reported complication caused by acupuncture treatment, but infectious complications may also be common. It is important to recognize that even one avoidable adverse event is too many (6). The adverse effects of acupuncture treatment can be avoidable with better anatomical knowledge and appropriate antiseptic practice. We report a case of serious infectious complication caused by acupuncture.

CASE REPORT

A 56-yr-old diabetic male patient was admitted to the hospital, with a 10-day history of right flank painful swelling and fever. Three months before, he slipped down and developed right flank discomfort without external wound. Twenty days prior to admission, he was treated with acupuncture for 10 days. After completion of the treatments, he experienced chilling sensation and right flank painful swelling. On admission,

clinical examination revealed a 5-cm sized localized painful swelling on the right flank area with signs of inflammation and tenderness. Fever (38.3°C), tachycardia (100/min), and an elevated white blood cell count (11,000/ μ L) were also noted. Contrast-enhanced computed tomography demonstrated a multi-septated abscess of about 10 cm in size, located on the right-side back muscle and abdominal wall (Fig. 1). Emergency operative drainage by a retroperitoneal approach was performed. Bacterial culture with blood and closed pus specimens recovered *Klebsiella pneumoniae*. After adequate drainage and antibiotic therapy, the patient was discharged without complications.

DISCUSSION

The use of acupuncture is becoming increasingly popular among medical as well as nonmedical therapists. In 1997, there were about 8,700 licensed acupuncturists in the United States; it has been calculated that they perform more than 10 million acupuncture treatments every year (7). Since 1965, serious and even life-threatening incidents in association with acupuncture treatments have been repeatedly reported (1-5). Adverse effects of acupuncture treatment included pneumothorax, infection, retained foreign body, and neurovascular injury. Acupuncture treatment consists of insertion of solid needles from 15 to 50 mm in length through the skin (6). The depth of insertion varies from a few millimeters to several

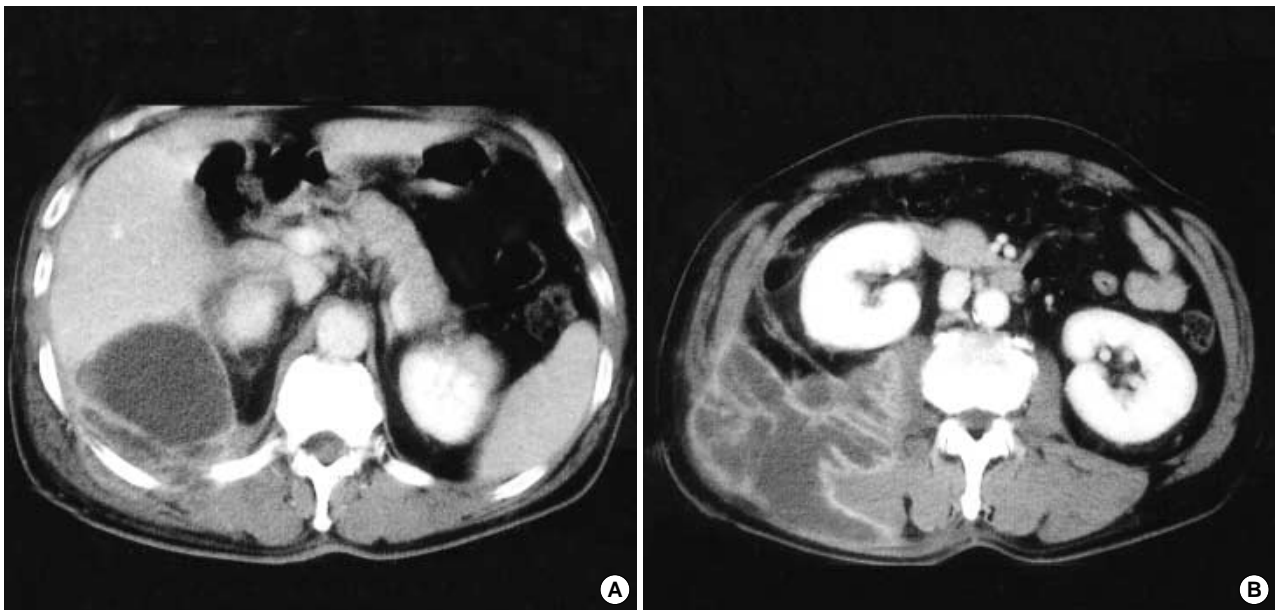


Fig. 1. Contrast-enhanced computed tomography images (A, B) show a 10-cm sized multi-septated cystic lesion with rim-like enhancement involving the right back muscles extending into the retroperitoneum.

centimeters. The tip of the needle often lies in a muscle, but many recognized acupuncture points overlie other structures. Therefore, acupuncture practitioners need a working knowledge of anatomy to avoid causing direct traumatic complications (6). Even though less serious and less urgent than pneumothorax, infectious complications may also be common. Furthermore, few of these complications may be more serious than other traumatic complications.

Despite modern antibiotics and intensive care, mortality from serious intra-abdominal or retroperitoneal infection remains high (5% to 50%) and morbidity is substantial. If a corrective operation and effective antibiotics are not employed promptly, the sequence of events termed multi-organ failure syndrome may ensue and cause the death of the patient even after the primary focus of the infection has been controlled. In our case, the diabetic male patient presented with septic condition, after acupuncture treatments. It seemed to be associated with diabetes and inappropriate antiseptic practice by the practitioner. After emergency operative drainage and adequate antibiotic therapy, he was discharged without complications. In addition to application of better knowledge on an-

atomy, appropriate antiseptic practice by practitioners will reduce many serious complications associated with acupuncture.

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