Acupuncture for the Management of Post-Dural Puncture Headache

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Introduction
Acupuncture is a major modality of pain and symptom management in the Traditional Chinese Medicine that has been used for more than 3,000 years. Since 1970, numerous clinical reports and trials have evaluated its efficacy. Acupuncture therapy has been shown to be effective in management of pain and nausea and vomiting. [1] We report our experience in using acupuncture for the management of post-dural puncture headache.

Case 1
A 17-year-old female patient was suffering from fatigue, swollen glands, excessive sleepiness, and febrile illness. A CT scan of her brain was negative. A spinal tap was performed to rule out meningitis. Her blood culture was positive for streptococcal infection. She was treated with antibiotics. She continues to suffer from positional headache. She felt a “pressing” headache, the pain of which increased when she got up out of bed or from sitting position. She was seen by her primary care physician and she was treated with caffeine. Flocet was also given, with no response. She was seen by a pediatric neurologist, who referred her for a blood patch. Her physical examination revealed that her diffuse, worsening headache was decreased by lying down. There was no clinical symptom of infection or meningeal sign. Acupuncture treatment was suggested. Her headache symptoms were significantly improved immediately after receiving acupuncture treatment.

Case 2
A 21-year-old patient was admitted to the hospital for treatment of headache. She was suffering from a recent visual impairment, and was also evaluated for multiple sclerosis. She underwent a lumbar puncture, which showed 16 white blood cells/mm³, one red blood cell/mm³, glucose of 105 mg/dL, and protein of 34.5 mg/dL. She was placed on prednisone therapy. The patient continued to experience severe headache and low back pain, and she was brought to the emergency room three days after the traumatic lumbar puncture. A lumbosacral MRI was performed, which revealed post-lumbar puncture fluid collection. After five days of symptomatic and supportive therapy for her headache and back pain, she was admitted to the hospital. For the past few days, she has suffered from constant frontal dull headache, which started after the spinal tap. She complained phono-sensitivity, photo-sensitivity, and severe postural headache. Her physical examination revealed no meningeal symptoms. Acupuncture treatment was suggested for her post-dural puncture headache and back pain secondary to the spinal tap. Both her headache and back pain were dramatically improved immediately after the acupuncture treatment. She was discharged from the hospital and followed up with us in the clinic three days after the initial acupuncture treatment, and her headache was completely resolved.

Discussion
Acupuncture is one of the most widely practiced non-pharmacological treatments for headache. A review of 26 trials including a total of 1151 patients using acupuncture for the treatment of headache revealed that the existing evidence supports the value of acupuncture for the treatment of idiopathic headaches.[2] It has also been reported that acupuncture was successful in reducing, but not totally alleviating, headache and pain associated with 'Barre Lieou syndrome'.[3] In this case report, both
patients’ post-dural puncture headache was relieved by acupuncture. Further randomized control trial is indicated to evaluate the effective of acupuncture for the treatment of post-dural puncture headache.

References