INTRODUCTION

The National Institutes of Health and the World Health Organization note that acupuncture is a safe and effective treatment for pain. Battle Acupuncture is an auricular acupuncture protocol developed in 2001. Auricular acupuncture is a safe, rapid, and effective analgesic modality in managing acute pain. It can be performed by nonacupuncturist health care providers, including medical students, after short training.

We describe 4 cases in which emergency physicians used auricular Battle Acupuncture to treat patients with severe acute pain in an emergency department (ED) after brief training.

Technique and Training

The Battle Acupuncture protocol uses up to 5 auricular acupuncture points per ear in sequence (video link). We used gold semipermanent darts (ASP; Sed Atelec, Chiminoles Muriens, Irigey, France) or traditional acupuncture needles (J-Type; Seirin Inc., Shizuoka Japan). Each emergency physician was trained in the insertion of ASP darts in a 1 hour Battle Acupuncture workshop given by an acupuncturist-physician.

CASE REPORT

Case 1

A 19-year-old woman with previous low back pain presented with recurrent low back pain for 2 days after heavy lifting. Her vital signs were normal, and she reported pain intensity as 8 on the 10-point Numeric Pain Rating Scale, with limited back flexion and extension of her back and hip. Ibuprofen 400 mg administered in triage did not aid after 30 minutes. Her physical examination showed right paraspinal muscle spasm with severe tenderness in the lumbar area. When offered oxycodone-acetaminophen, the patient refused; she agreed to auricular acupuncture.

A senior emergency medicine resident, novice to acupuncture, inserted ASP darts in all 5 auricular points. After an hour, the patient reported a pain score of 3 of 10 and improved mobility with back flexion and extension, and was discharged from the ED. On telephone follow-up 3 days later, the patient reported a pain score of 1 of 10, without the use of any oral analgesic medication.

Case 2

A 15-year-old adolescent, accompanied by her mother, presented with low back pain that radiated down the left leg. Her vital signs were normal, and she rated pain intensity at 8 of 10. Her physical examination showed lumbar paraspinal muscle spasm, with limited range of motion of the back and hips. The mother reported that ibuprofen was ineffective, and she refused any opioid medication.

A senior emergency medicine resident, novice to acupuncture, inserted ASP darts in all 5 auricular points. After an hour, the patient reported a pain score of 3 of 10 and improved mobility with back flexion and extension, and was discharged from the ED. On telephone follow-up 3 days later, the patient reported a pain score of 1 of 10, without the use of any oral analgesic medication.
Case 3
A 19-year-old woman with carpal tunnel syndrome presented with worsening left wrist pain not relieved by ibuprofen, rating pain as an 8 of 10 intensity (see video link: https://youtu.be/oOujSLjcTFI). After a senior emergency physician novice to auricular acupuncture but trained in traditional acupuncture inserted 3 Seirin J-Type needles in her left auricle, she reported no pain. Additionally, left wrist range of motion improved from pretreatment and was symmetric between both wrists. On follow-up 3 days later, the patient was still pain free and had full range of motion at the left wrist.

Case 4
A 9-year-old boy with appendicitis experienced a pruritic reaction to morphine in the ED while awaiting surgery. He reported pain at a 5 of 10 intensity and received left ear auricular acupuncture with 3 Seirin J-Type needles by the same senior emergency physician mentioned in case 3. Needles were left in place for 1.5 hours and removed just before transfer to the operating room. During this interval, the patient had no pain and ambulated without difficulty (video link: https://youtu.be/OlkJ2f1PP0I). The child underwent appendectomy without complications.

DISCUSSION
Acupuncture is a traditional Chinese medicine therapy that can be traced back to 2600 BC. Despite more than 4,000 years of its use and a recommendation from Sir William Osler on its use for low back pain, acupuncture has only begun to gain acceptance in the last few decades in western medical health care systems. Randomized controlled trials note effectiveness of acupuncture in a variety of painful conditions, including back pain, neck pain, osteoarthritis, and headache. Acupuncture releases endogenous opioids in the body, and its analgesic effects are blocked by naloxone in a dose-dependent manner. Other reports of acupuncture use in the ED exist for patients with sickle cell vaso-occlusive events, low back pain, musculoskeletal pain, renal colic, and appendicitis. Battlefield Acupuncture is promising for acute pain therapy but not previously reported in the ED care setting, to our knowledge.

 Limitations
Our series cannot define overall utility and safety, although use in other settings shows the latter to be of limited concern. The placebo effect may contribute to the relief of acute pain in this uncontrolled series. Furthermore, the exact mechanism for auricular Battlefield Acupuncture analgesia is not completely known. Finally, the retention...
and broader acceptance of this modality by providers and patients is unstudied in the ED.

Conclusion
We believe that the cases reported here illustrate the potential for Battlefield Acupuncture as another analgesic option that emergency physicians currently seldom learn or use in clinical care.

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REFERENCES