

## Implementation of shared medical appointments to offer battlefield acupuncture efficiently to veterans with pain

### BACKGROUND

The use of prescription opioids in the treatment of pain has increased notably over recent decades.<sup>1</sup> With this increase, dramatic unintended consequences have arisen. Rates of death from prescribed opioids increased fourfold between 2000 and 2014.<sup>2</sup> Integrative care has been suggested as a potentially safer alternative to opioids in the treatment of chronic non-cancer pain and acupuncture has been shown to be an effective treatment for chronic pain.<sup>3</sup> Battlefield acupuncture (BFA), an easily learnt subset of auricular acupuncture, has been proposed to treat a variety of painful disorders in active military members and veterans.<sup>4</sup> Patients undergo insertion of five auricular semi-permanent (ASP) needles to the following traditional ear acupuncture points bilaterally: *Cingulate Gyrus*, *Thalamus*, *Omega 2*, *Point Zero* and *Shenmen* (figure 1). While other investigators have evaluated models for integrating medical acupuncture into practice,<sup>5</sup> to our knowledge, there has been no evaluation of how to incorporate BFA efficiently into a busy primary care (PC) practice. Since shared medical appointments (SMA) have been



**Figure 1** Image of patient receiving battlefield acupuncture at the following traditional ear acupuncture points bilaterally: *Cingulate Gyrus, Thalamus, Omega 2, Point Zero and Shenmen*.

shown to be helpful in chronic disease management and may decrease healthcare utilisation, we developed an SMA approach to deliver BFA in the setting of a US Department of Veterans Affairs (VA) PC practice.

#### IMPLEMENTING SMA FOR BFA IN PC

One of the authors (DGF) underwent 4 hours of BFA training by a certified medical acupuncturist (also trained in BFA) and, in an effort to expand the availability of the service and minimise any impact on access to routine care, we created a 90 min SMA solely for BFA. Patients were recruited via a large informational poster in the PC clinic waiting area that provided an explanation of BFA and invited them to ask their provider or nurse for more information, if interested. Simultaneously, emails were sent to all 36 PC providers at the West Haven VA medical centre informing them that an SMA was available to any of their patients who were interested in BFA for any acute or chronic pain. A separate 90 min

group clinic was created within the VA's software package, capable of accommodating eight patients. Over the ensuing 4 weeks, seven additional clinics were created over a 3-month period and all 52 appointment slots were filled. To date, six group clinics have been completed and 43 patients have been seen within that context.

The first 30 min of the appointment consisted of a group informational session detailing what BFA entails, including potential risks and benefits, and aftercare. It was also explained to patients that their pain issues needed to have been thoroughly assessed by their PC providers before they could receive BFA. Those willing to undergo the procedure then signed informed consent. During each clinic, the patient's baseline pre-treatment numerical pain score was recorded using the Defense and Veterans Pain Rating Scale (where 1='hardly notice pain' and 10='as bad as it could be, nothing else matters'). The pain score was recorded after each successive BFA point. Patients were contacted by telephone 1 day and 7 days after

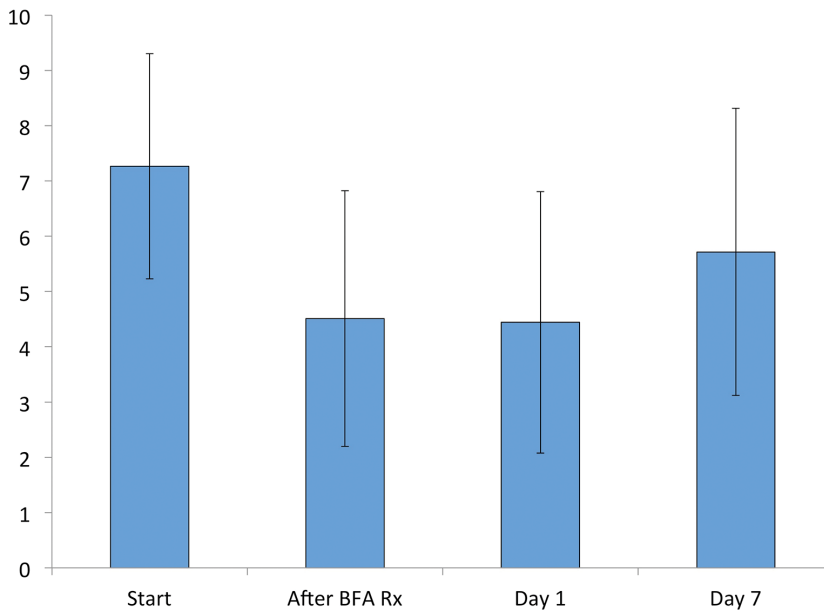
the SMA to assess their pain at that point in time.

#### FINDINGS

As shown in [figure 2](#), the mean $\pm$ SD pain scores at the start were  $7.3\pm 2.0$ . After BFA treatment, the pain scores decreased to  $4.5\pm 2.3$  ( $p<0.01$  using paired two sample t-test). At day 1 and day 7, the mean pain scores were  $4.4\pm 2.4$  and  $5.7\pm 2.6$ , respectively ( $p<0.01$  for both comparisons when compared with baseline). Pain decreased in 41 of 43 patients (95.3%) on the day of BFA treatment, and in 39 of 43 patients (90.7%) on day 1. Pain scores remained lower in 30 of 42 patients (71.4%) on day 7. No patients reported increased pain with BFA on the day of treatment or 1 day after treatment. Only six of 42 patients contacted on day 7 (14.3%) reported increased pain 7 days after BFA treatment.

#### IMPLICATIONS FOR CLINICAL EFFECTIVENESS

Pain is associated with decreased quality of life and is one of the most common presenting symptoms in PC. However, it remains poorly understood and traditional, pharmacologically-based treatment approaches are fraught with complications. Thus, offering patients effective non-pharmacological options for pain relief should be a priority. BFA has the potential to help patients but, given the high prevalence of patients with chronic non-cancer pain, competing medical comorbidities and the need to maintain access to healthcare providers, implementation of novel, non-traditional venues should be considered. We have described a well-received and efficient manner in which to offer an integrative modality within the context of a busy PC practice. Potential barriers that we were able to overcome included finding adequate space for a group of this size, obtaining training in BFA and institutional credentialing, and developing an efficient manner in which to perform BFA. Ultimately, our clinical results are limited by our self-selected patient population and



**Figure 2** Pain scores before, immediately after, and 1 and 7 days following a session of battlefield acupuncture (BFA) in 43 patients seen via a shared medical appointment model in a US Department of Veterans Affairs primary care practice. Data are presented as mean±SD.

the lack of a comparison group and longer term follow-up to ascertain the durability of response. However, our preliminary results suggest that BFA performed in a group setting at a VA institution appears effective for short-term pain reduction.

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