

Wrist Acupuncture May Reduce Postop Nausea

BY ROBERT FINN

Stimulation of the P6 acupuncture point on the wrist significantly reduced the risk of postoperative nausea and vomiting, according to a new meta-analysis of 40 randomized, controlled trials involving 4,856 participants.

Compared with sham treatment, several forms of P6 stimulation reduced the risk of nausea by 29%, the risk of vomiting by 30%, and the need for rescue antiemetics by 31%, wrote Dr. Anna Lee and Dr. Lawrence T.Y. Fan for the Cochrane Collaboration (Cochrane Database Syst. Rev. 2009 [doi:10.1002/14651858.CD003281.pub3]).

Those relative risks were statistically significant. In direct comparisons with antiemetic drugs, P6 stimulation proved to be equally effective in reducing nausea, vomiting, and the need for rescue antiemetics.

The side effects of P6 stimulation were minor, whether the stimulation was performed with traditional acupuncture needles, electroacupuncture, laser acupuncture, transcutaneous electrical stimulation, an acustimulation device, acupressure, or capsicum plaster.

Acupuncture needles produced hematomas on rare occasions, and some patients reported pain, irritation, redness, fatigue, or sleepiness. Patients receiving acupressure with wrist bands occasionally complained of discomfort, red indentations, blisters, and swelling. One

patient complained of mild irritation at the site of the capsicum plaster.

"Drugs only partially prevent postoperative nausea and vomiting, and they, of course, have a lot of adverse side effects," said Dr. Geno J. Merli in an interview. Dr. Merli, chief medical officer of Thomas Jefferson University Hospital, Philadelphia, was not involved in the meta-analysis. Patients on antiemetic drugs can have changes in mental status and can develop confusion or disorientation. Some patients become stimulated by the antiemetic agent, while others can experience oculogyric crises, a very rare complication.

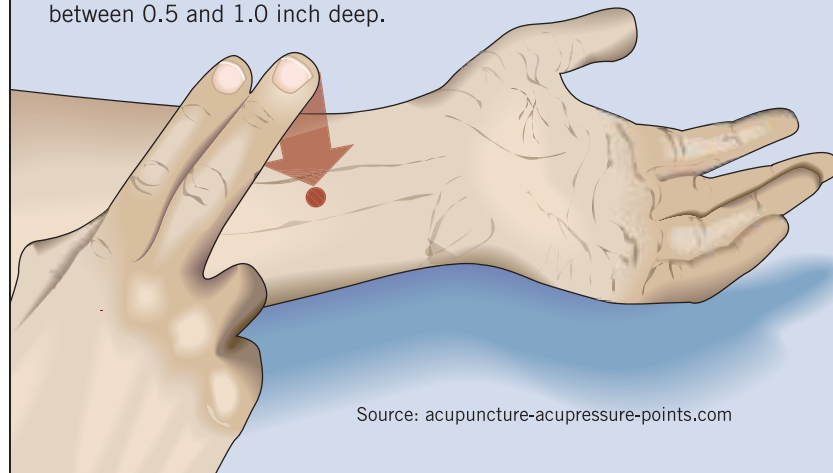
Dr. Merli was especially intrigued by the notion that wrist stimulation could be used prophylactically to prevent nausea and vomiting. Antiemetic medications are typically given as needed if postop patients develop symptoms.

Dr. Lee and Dr. Fan, both from the Chinese University of Hong Kong, acknowledged that publication bias is a frequent problem in randomized, controlled trials of traditional Chinese medicine. Negative studies are less likely to be published than are positive ones. But using a statistical technique called "contour enhanced funnel plots," the investigators found no evidence of publication bias among the studies included in their meta-analysis.

"I was not a believer in acupuncture as a postoperative nausea and vomiting preventative," Dr. Merli said. "I saw this review and said we should be doing this more often."

Acupuncture Point P6

The point is 2 inches up to the wrist bracelet, between the two tendons. Apply pressure between 0.5 and 1.0 inch deep.



Source: acupuncture-acupressure-points.com

EMILY BRANNAN/ILLUSTRATION

However, hospitals would have to be convinced of the cost-effectiveness of P6 stimulation, Dr. Merli added. He noted that the acupressure wristbands available in drugstores cost about \$10. Even if hospitals could get that cost down to \$5, they would have to compare that to 5 cents or so for a dose of prochlorperazine. The real savings would come, Dr. Merli noted, if P6 stimulation reduced the average length of hospital stays.

Dr. Merli suggested that P6 stimulation might be reserved for patients for whom postop nausea and vomiting present a particular risk, such as those undergoing abdominal, thoracic, or brain surgery.

P6 stimulation "is a good option," said Dr. Jessica Zuleta, an internal medicine hospitalist at the University of Miami. But it shouldn't completely replace antiemetics, she added, because the studies are limited. She called for more rigidly controlled, blinded studies comparing P6 stimulation and antiemetic drugs.

Dr. Lee and Dr. Fan said they had no relevant conflicts of interest. The study was supported by the U.S. National Center for Complementary and Alternative Medicine, the Chinese University of Hong Kong's department of anesthesia and intensive care, and the Cochrane Complementary Medicine Field Bursary. ■

Balance Risk of Bleeding vs. Clotting in Warfarin Patients

BY DAMIAN McNAMARA

MIAMI BEACH — The perioperative risk of thromboembolism is small but real for warfarin patients who discontinue anticoagulation to undergo noncardiac surgery or other procedures. Bridging therapy can reduce this risk, but it increases the likelihood of postoperative bleeding, so clinical judgment, guideline recommendations, and individual patient and surgical factors remain paramount, Dr. Amir K. Jaffer said.

"This whole area lacks randomized, controlled trials, and management is guided by observational data and consensus," Dr. Jaffer said at a meeting on perioperative medicine sponsored by the University of Miami. "You have to balance risk of bleeding against the risk of clotting."



'Weigh the consequences of thromboembolism and bleeding and then determine the need for bridging therapy.'

DR. JAFFER

division of hospital medicine at the University of Miami, and a coauthor of the ACCP guidelines. "It is a highly litigated area of perioperative medicine. Every week or so I have an attorney calling me to serve as an expert; the plaintiffs' attorneys are always going after these types of cases." One reason warfarin is big business for lawyers is that an estimated 3 million patients are taking the drug in North America, and 400,000 of these are evaluated for bridging therapy each year, according to the American Heart Association 2002 Heart and Stroke Statistical Update.

Although the dangers are clinically significant, they affect only a minority of patients. "The risk of thromboembolism is low. It's not zero; it is about 1%," Dr. Jaffer said. For example, 2 of 224 (0.9%) of warfarin patients experienced a cardiac thromboembolism in one study (Circulation 2004;110:1658-63).

The risk of major bleeding in this series was 6.9%. However, the average risk of major bleeding is 3%-3.5% across studies in the literature for patients with a valve or other indication who have warfarin discontinued and receive low-molecular-weight heparin (LMWH) as a bridge. For example, major bleeding occurred in 3.5% of 260 patients in one study (J. Thromb. Haemost. 2007;5:2211-8) and 3.3% of 721 patients in another (J. Thromb. Haemost. 2006;4:1246-52).

There can be increased bleeding immediately postoperatively with full-dose LMWH or unfractionated heparin, "but this can likely be minimized by delaying reinitiation of full-dose heparin ... for up to 48 hours,

depending on the type of surgery," Dr. Jaffer said. In the interim, lower prophylactic doses may be warranted. "Those centers who dose everyone with full doses were at [six times] higher risk for major bleeding than those who did not give full doses," according to unpublished data on 500 patients.

Guidelines support bridging patients with therapeutic doses of subcutaneous LMWH, rather than intravenous unfractionated heparin, as there is a paucity of data for intravenous unfractionated heparin, said Dr. Jaffer, who is also associate professor of medicine at the University of Miami. Dr. Jaffer is a consultant for Sanofi-Aventis, AstraZeneca, Bristol-Myers Squibb, and Boehringer Ingelheim. He receives research and grant support from AstraZeneca and is on the speakers bureau for Sanofi-Aventis and Roche Diagnostics.

Although both thromboembolic events and major bleeding can be fatal, mortality and morbidity rates differ for the two conditions. "With bleeding, patients can be resuscitated; with a thromboembolic event, they can have long-lasting disability," Dr. Jaffer said. Major bleeding events rarely result in permanent disability, but 9%-13% are fatal (Ann. Intern. Med. 2003;139:893-900). In contrast, an estimated 20% of arterial thromboembolic events are fatal, and more than 50% result in permanent disability (Arch. Intern. Med. 1994;154:1449-57).

Ultimately, the decision on how to manage warfarin patients perioperatively relies on individual risk factors. The patients' indication for anticoagulation, their risk profile for thromboembolism, the type of surgery, and the likely amount of time they will be off warfarin therapy are important considerations, Dr. Jaffer said. "Weigh the consequences of thromboembolism and bleeding and then determine the need for bridging therapy." ■