

The most common acupuncture points prescribed for postoperative gastrointestinal dysfunction – a data mining study

George Matli, BA¹, Shu-Ming Wang, MS., MD²

¹Quinnipiac University Frank H. Netter MD School of Medicine, North Haven, CT, ²Department of Anesthesiology, University of Connecticut, Farmington, CT & Department of Nurse Anesthetist, Quinnipiac University School of Nursing

Introduction:

Postoperative nausea and vomiting (PONV) and postoperative ileus (POI) are common post-surgical complications. PONV is estimated to affect 20–30% of average risk patients and 70–80% of high-risk patients (Amirshahi et al. 2020). POI affects approximately 10% of abdominal surgery patients (Harnsberger et al. 2019). Acupuncture has been used successfully to prevent and treat PONV and POI. The goal of this study was to conduct a data mining analysis of all available published articles to identify the most common acupuncture points used in the perioperative management of PONV and POI.

Methods:

A search was conducted for all articles using perioperative acupuncture in postoperative nausea and vomiting (PONV) and postoperative ileus (POI). PubMed and Scopus databases were utilized. Articles published prior to July 2023 were included. Limits applied to database search included: final articles, randomized controlled trials, human subjects, and articles available in English. Duplicates were removed using Refworks initially. Manual screening for the most relevant articles and removal of missed duplicates was done for final selection.

Discussion:

Although Traditional Chinese Medicine emphasizes individual treatment, the prescriptions of acupuncture points for gastrointestinal dysfunctions, namely PONV and POI, following anesthesia and surgery were very consistent.

Ex-HN3 (Yintang)- On the forehead, at the midpoint between the two medial ends of the eyebrows.

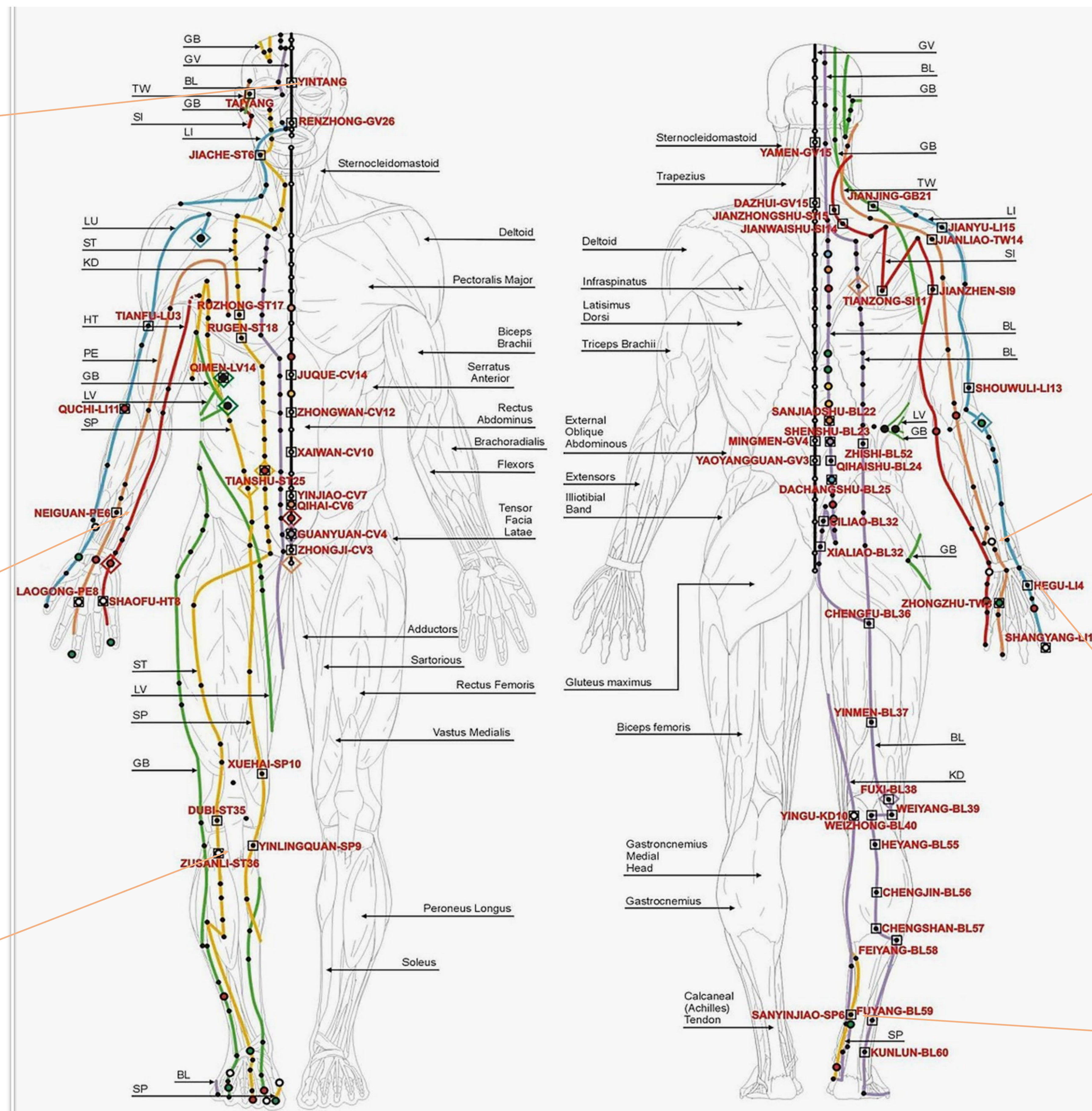
PC6 (Neiguan)- 2 cun above the transverse crease of the wrist, palmar aspect of the forearm, on the line connecting PC 3 and PC 7, between the tendons of m. palmaris longus and m. flexor carpi radialis.

St36 (Zusanli)- Anterior aspect of the lower leg, 3 cun below ST 35, one finger-breadth (middle finger) from the anterior crest of the tibia.

TE6 (Zhiqiu)- Dorsum of the forearm, 3 cun above the transverse crease of the wrist between the ulna and radius, along the line connecting TE 4 and the tip of the elbow.

L14 (Hegu)- Dorsum of the hand, between the 1st and 2nd metacarpal bones, in the middle of the 2nd metacarpal bone on the radial side.

SP6 (Sanyinjiao)- On the medial side of the lower leg, 3 cun above the medial malleolus prominence.



Results:

A total of 1,398 articles resulted during the initial search (882-Scopus, 516-Pubmed). Results were narrowed to 529 after filters were applied. Out of the 52 most relevant articles selected, 18 met criteria for data mining. A total of 34 acupuncture points were found. The most frequently prescribed acupoints were: PC6 (Neiguan), St36 (Zusanli), L14 (Hegu), SP6 (Sanyinjiao), TE6 (Zhiqiu), and EX-HN3 (Yintang).

