

# The most common acupuncture points prescribed for postoperative cognitive dysfunction/delirium – a data mining study

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## Introduction:

Postoperative cognitive dysfunction (POCD) and postoperative delirium (POD) are common post-surgical complications. POD usually occurs 24-72 hours after surgery while POCD is seen weeks after and lasts longer (Huang et al., 2018). Acupuncture has been used to prevent and treat POCD and POD. The goal of this study was to use data mining by collecting all available published articles to identify the common prescriptions of acupuncture points used in prevention and treatment of POCD and POD in the adult population.

## Methods:

A search was conducted for all articles using perioperative acupuncture in post-operative cognitive dysfunction (POCD) and postoperative delirium (POD). PubMed, Scopus, and Google Scholar databases were utilized. Only articles from 2018-2023 were included. Limits applied to database search included: final articles, randomized controlled clinical trials, adult, and human subjects. Duplicates were removed using Refworks initially. Manual screening for the most relevant articles and removal of missed duplicates was done for final selection

## Results:

A total of 5070 articles resulted during the initial search (261-Scopus, 2749-Pubmed, 2060-Google Scholar). Results were narrowed to 581 after filters were applied. Out of the 70 most relevant articles selected, 29 were included for data mining. A total of 60 acupuncture points were found. The top acupoints prescribed were: PC6 (Neiguan), GV20 (Baihui), St36 (Zusanli), LI4 (Hegu), GV24 (Shenting), SP6 (Sanjinjiao), HT7 (Shenmen), GV29 (Yintang), LI11 (Qu chi), GV14 (Dazhui), Ex-HN1 (Shishencong), and LR3 (Taichong).

GV24 (Shenting)- Half cun directly above the midpoint of the anterior hairline of the head.

GV29 (Yintang)- Midpoint between the two medial ends of the eyebrows on the forehead.

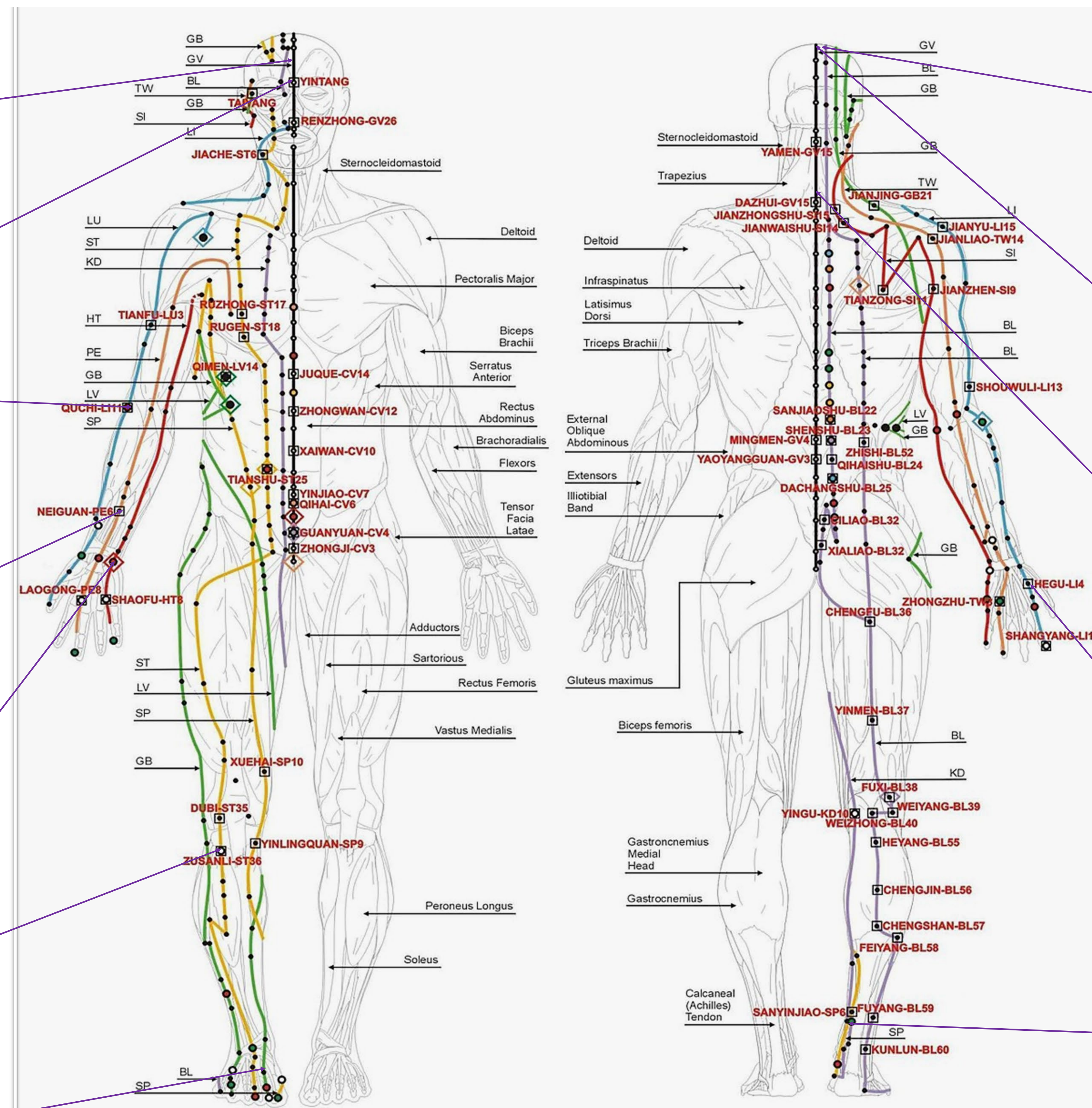
LI11 (Qu chi)- While elbow is flexed, the point is on the lateral end of the transverse cubital crease, at midpoint between LU 5 and the lateral epicondyle of the humerus.

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.

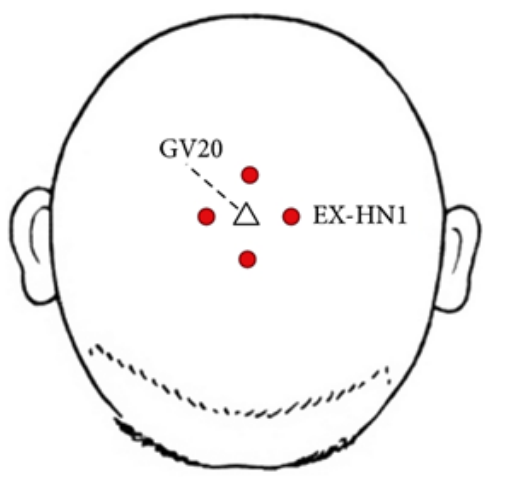
HT7 (Shenmen)- Ulnar end of the transverse crease of the wrist, in the depression on the radial side of the tendon m. flexor carpi ulnaris.

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.

LR3 (Taichong)- Dorsum of the foot, in the depression proximal to the 1st metatarsal space.



Ex-HN1 (Shishencong)- Vertex of the head, a group of four points, 1.0 cun respectively anterior, posterior and lateral to DU 20.



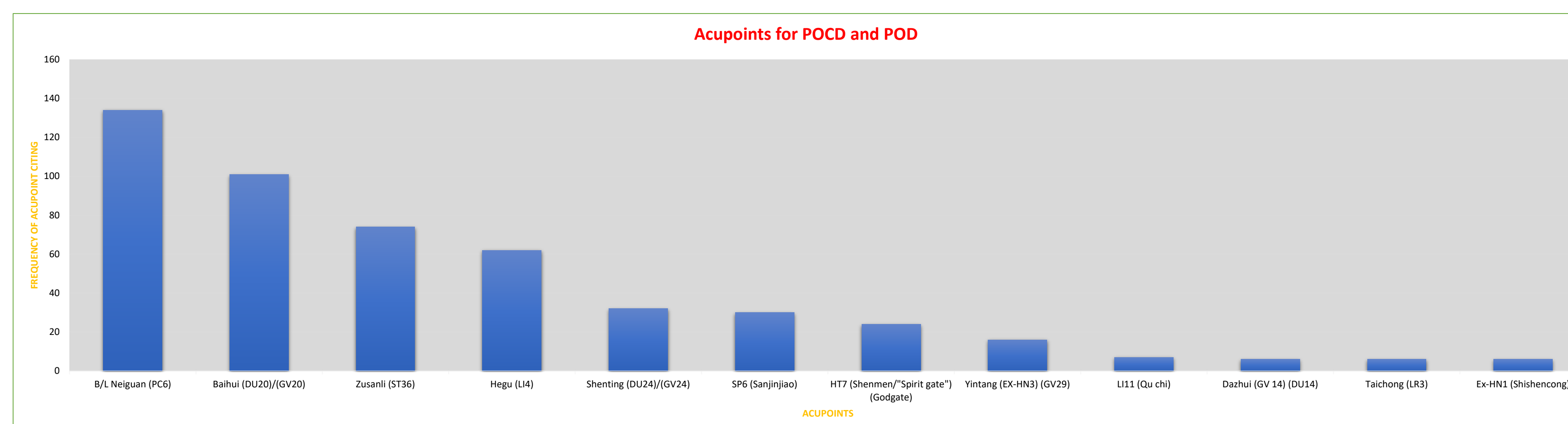
GV20 (Baihui)- 5.0 cun directly above the midpoint of the anterior hairline or at midpoint of the line connecting the apexes of the two auricles.

GV14 (Dazhui)- Posterior median line, in the depression below the spinous process of the 7th cervical vertebra.

LI4 (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 (Sanjinjiao)- On the medial side of the lower leg, three cun above the medial malleolus prominence.

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