Background and Aims Preoperative rehabilitation in femoral-neck fracture patients has been shown to improve postoperative outcomes but it can be challenging due to intolerable pain. The pericapsular nerve group (PENG) block has been utilized for postoperative pain control for femoral-neck fracture repair with motor-sparing features. This study seeks to assess the efficacy of PENG block in preoperative rehabilitation for femoral-neck fracture patients.

Methods Ten patients with Garden classification 3-4 femoral-neck fractures scheduled for total hip arthroplasty, were prospectively enrolled from April-July 2022 at Kameda Medical Center, Japan (PENG group). These patients received PENG block with 20 ml of 0.375% ropivacaine before the initial preoperative rehabilitation. The rehabilitation program included nine mobility levels of bed-sitting, edge-sitting, standing, wheelchair-transfer, marching, walking with two or one staff, and walking with or without a device. Data from twenty-six patients with the same eligibility who received the same rehabilitation program with standard pain management from April 2021-March 2022 were collected as a control group. The primary outcome was the cumulative outcome of the rehabilitation program. The secondary outcomes included the numerical rating scale (NRS) score and a higher home-discharge rate. No adverse events related to PENG block were observed.

Conclusions PENG block may facilitate preoperative rehabilitation in femoral-neck fracture patients.

Background and Aims General anesthesia is commonly preferred in laparoscopic cholecystectomies (LC). However, different anesthesia approaches can be applied in high-risk patients. In this study, we aimed to present a case of a pulmonary high-risk patient who underwent LC with paravertebral block and Quadratus Lumborum-III block (QLB).

Methods The 62-year-old male patient had a history of hypertension, COPD, and previous tuberculosis. The patient’s test results revealed FEV1 of 49%, FEV1/FVC ratio of 68%. The patient had dyspnea, and computed tomography showed destructive, fibrotic changes and pleural thickening in the lungs. Due to high pulmonary risk, regional anesthesia was planned for this patient. Bilateral paravertebral block (figure 1) and bilateral QLB-III (figure 2) were applied for 30 minutes before the operation at the thoracic 8 level. The patient, who had T4-T12 dermatome involvement, was sedated with 2 mg midazolam and 50 mcg fentanyl, and then taken to the operation room (figure 3). The patient’s Richmond Agitation Sedation Scale remained at -1 during the operation.