Background/hypothesis No golden standard for analgesia in video-assisted thoracic surgery (VATS) lobectomy exists. A simple multimodal approach using an intercostal catheter (ICC) may be of benefit since acute post-operative pain following VATS lobectomy primarily originates from the chest drain area.
Methods Prospective observational cohort. Forty-eight consecutive patients received a standardized regimen consisting of paracetamol, non-steroidal anti-inflammatory drug and gabapentin. Further, surgeons performed a single-shot paravertebral block (PVB) at five levels (15 ml of 0.5% bupivacaine) and inserted an ICC at the drain site level for continuous delivery of 6 ml of 0.25% bupivacaine h^{-1}. Pain scores at rest, mobilization and with the extended arms were followed until discharge or for 4 days.
ResultsForty-eight patients, mean age 64 years (CI: 61–68), were included. The mean time for the PVB and ICC placement was 5 min (CI: 4.7–5.9). The mean pain score at rest using a numerical rating scale (NRS, 0–10) was <3 for 1–16 h and decreased from 4.7 to 1.7 (NRS day 1–4, getting out of bed). The ICC was removed with the drain in 48/73/92% on day 1/2/3 after surgery. The median day of discharge was 3 (interquartile range 2–4) with >85% of patients reporting satisfactory or very satisfactory pain treatment all days.
Conclusions Acute pain after VATS lobectomy may be adequately controlled using a multimodal non-opioid regime including PVB and an ICC. The low pain scores and reduced time used inserting the ICC may present an alternative to continuous epidural analgesia or conventional PVB.