The aim of this study was to compare single-port access cholecystectomy (SPA) with the standard laparoscopic technique (LC) regarding the duration of the operation, complications, learning curve, late postoperative quality of life (QoL) and the incidence of incisional hernias. Between June 2009 and December 2011, a total of 122 SPA cholecystectomies were performed in our hospital. Simultaneously, 310 patients were operated on with the LC technique. In the LC group, 100 patients met the same criteria defined for SPA surgery. The two groups (SPA and LC) were compared by multivariable regression analysis. Endpoints of this study were quality of life (QoL) after 6 months by the EQ-5D questionnaire 5L and the incidence of incisional hernia 1 year after surgery. Operating time, hospital stay, and perioperative complications were also measured and compared. The median follow-up was 9.2 months (3-25 months). The patients in the SPA group were younger and more often female. The mean operating time for group SPA was 73 min (35-136 min)-significantly longer than that for group LC with 60 min (33-190 min) (p<0.001). Additional trocars were used in 8 of 122 (6.5 %) SPA patients. A conversion to open cholecystectomy was not necessary in SPA patients. The conversion rate in the LC group to open cholecystectomy was 2 % (2/100). The perioperative and postoperative complications and
incisional hernia (5.5 %) were the same in both groups. QoL was significantly better in the SPA group in terms of mobility (p = 0.002), usual activity (p = 0.036), and overall anxiety (p = 0.026). SPA cholecystectomy is safe, although the operation is significantly longer. No differences in terms of major complications or the incidence of incisional hernia were seen after 1 year. QoL was significantly better in patients operated on with the SPA technique.