Register-based studies on cholecystectomy
Quality of life after cholecystectomy, and cholecystectomy incidence and complications after gastric bypass

av

Viktor Wanjura

Akademisk avhandling

Avhandling för medicine doktorsexamen i kirurgi, som kommer att förvaras offentligt
Fredag den 6:e oktober 2017 kl. 09:00,
Hörsal C1, Campus USÖ

Opponent: docent Ville Wallenius,
Institutionen för kliniska vetenskaper,
Sahlgrenska universitetssjukhuset,
Göteborg

Örebro universitet
Institutionen för medicinska vetenskaper
701 82 ÖREBRO
Abstract


Cholecystectomy (removal of the gallbladder) is standard surgical treatment for patients with symptomatic gallstone disease, albeit not without complications. Assessing the impact on quality of life is crucial for appropriate cholecystectomy patient selection, and the Gastrointestinal Quality of Life Index (GIQLI) is a 36-item questionnaire validated for this purpose.

Obesity and gastric bypass surgery each entail an increased risk of cholecystectomy, but the baseline cholecystectomy incidence in the obese population undergoing gastric bypass is unknown. Furthermore, the complication rate for cholecystectomy after gastric bypass has only been sparsely studied.

In Study I, GIQLI outcome in a post-cholecystectomy cohort of 451 patients from Mora County Hospital, Sweden, was explored. The primary cholecystectomy indication, together with sex, was found to predict gastrointestinal symptoms and abdominal pain after cholecystectomy.

In Study II, the GIQLI scores in the post-cholecystectomy cohort of Study I were compared with an age- and sex-matched control group of 390 individuals from the background population. The post-cholecystectomy cohort stated significantly more gastrointestinal symptoms, especially symptoms related to bowel function such as diarrhoea, bowel urgency and bloating.

Study III was based on a cross-matching of the Swedish cholecystectomy register (GallRiks) with the Scandinavian obesity surgery register (SOReg). Previous gastric bypass doubled the postoperative complication rate after cholecystectomy and nearly quadrupled the reoperation rate. Compared with population data from the National Patient Register (NPR), the cholecystectomy incidence was substantially elevated already before gastric bypass and increased during month 6-36 thereafter.

In Study IV, the cross-matched GallRiks-SOReg database from Study III was used to compare aggregate complication rates for cholecystectomy and gastric bypass depending on the order of the two procedures. There was a significantly lower aggregate complication rate if cholecystectomy was performed before gastric bypass rather than after.

Keywords: cholecystectomy; gastric bypass; bariatric; obesity; incidence; complications; register; gastrointestinal symptoms.

Viktor Wanjura, School of Health and Medical Sciences, Örebro University, SE-70182 Örebro, Sweden.