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Variations in the management of a common disease

INVITERT KOMMENTAR

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We like to believe that we always follow 'national guidelines' in patient care. Regardless of where a patient lives, everyone should have equal access to diagnostic procedures and treatment. However, there are no national guidelines for gallstone disease.

Gallstone disease is one of the most common diagnoses leading to acute admission to surgical departments and is defined as cholecystitis, gallstone-induced pancreatitis, common bile duct stones and/or biliary colic. In 2024, approximately 7500 cholecystectomies were performed in Norway (1). Nevertheless, there are no national guidelines for the investigation and management of gallstone-related conditions. Internationally, the Tokyo Guidelines are often used as a reference (2).

Kazaryan et al. sought to map current practices for managing gallstone disease in Norway. They devised and distributed a questionnaire to 41 hospitals performing cholecystectomies, receiving responses from 40. The results are published in this edition of the Journal of the Norwegian Medical Association (3).

The authors categorised the hospitals as low-volume (< 50 operations), medium-volume (50–200) or high-volume (> 200), according to the number of cholecystectomies performed (acute and elective). Thirty-one of the 40 hospitals performed acute cholecystectomy, and those that did not cited a lack of capacity for emergency surgery as the reason.

Volume is an ongoing topic of discussion in all surgical specialties (4–6). Kazaryan et al. found that low surgical volume did not explain the differences in patient care. No data were collected on postoperative complications or other quality indicators, and the study could not therefore provide information on the quality of the procedures performed.

Laparoscopic cholecystectomy is typically introduced at an early stage of surgical specialist training to give doctors experience in laparoscopic techniques within a supervised hands-on learning environment. All specialty registrars are required to complete mandatory laparoscopic training in which cholecystectomy is covered in detail. It would therefore be reasonable to assume that the procedure was performed uniformly across Norway, but Kazaryan et al. did not find this. The implication is that clinical practice is based on experience, with surgeons performing procedures according to the approach they are most proficient in.

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Acute cholecystectomy can be technically challenging, and the survey revealed variations in the surgical approach used for complex procedures. This variation was independent of surgical volume. In low-volume hospitals, experienced colleagues are not always available. In such cases, it is important to have surgical strategies to manage difficult situations, particularly once the procedure has progressed to a stage where it cannot be safely abandoned. Acute cholecystectomy should therefore ideally be performed during daytime hours, when assistance from colleagues and access to support services are readily available if needed.

Kazaryan et al. describe several differences between hospitals, including indications for cholecystectomy, dissection techniques and the use of intraoperative cholangiography and postoperative antibiotic therapy. They also observed differences in the management of common bile duct stones. It should be noted that hospitals that do not perform endoscopic retrograde cholangiopancreatography (ERCP) refer patients to hospitals with gastroenterological surgeons and/or gastroenterologists who have this expertise.

Norway has numerous national quality registers that can help standardise indications, procedural techniques and the reporting of complications, whereby each hospital can compare and quality-assure its own results against the national average. The management of common bile duct stones can be entered in the Gastronet register, which in 2024 had a 65 % coverage rate (3663 of 5615 procedures) for ERCP procedures (7). There is no dedicated quality register for cholecystectomy, but some hospitals record procedures in NORGAST (Norwegian Registry for Gastrointestinal Surgery) under 'non-mandatory procedures' (8). NORGAST can be used for local quality improvement initiatives for both elective and emergency operations. Based on the results of the survey, hospitals should be encouraged to review their own procedures and protocols and utilise the available quality registers to examine their outcomes and compare them with national data.

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Kazaryan et al.'s article provides new and valuable information on the management of patients with gallstone disease in Norwegian hospitals. It will hopefully inspire colleagues nationwide to adhere to existing guidelines and, based on these, to develop national recommendations.

REFERENCES

1. Helsedirektoratet. Infeksjon - postoperative infeksjoner etter fjerning av galleblære (kolecystektomi). https://www.helsedirektoratet.no/statistikk/kvalitetsindikatorer/infeksjoner/postoperative-infeksjoner-etter-fjerning-av-galleblære-(kolecystektomi) Accessed 19.1.2026.

2. Japanese Society of Hepato-Biliary-Pancreatic Surgery. Tokyo Guidelines 2018. https://www.jshbps.jp/modules/en/index.php?content_id=47 Accessed 19.1.2026.

3. Kazaryan AM, Fasting M, Glomsaker T et al. Behandling av gallesteinsykdom ved sykehus med akuttkirurgisk funksjon. Tidsskr Nor Legeforen 2026; 146. doi: 10.4045/tidsskr.25.0015. [PubMed][CrossRef]

4. Feliberti EC, Perry RR. Volume as a marker of surgical quality. J Surg Oncol 2007; 96: 539–40. [PubMed][CrossRef]

5. Harrison A. Assessing the relationship between volume and outcome in hospital services: implications for service centralization. Health Serv Manage Res 2012; 25: 1–6. [PubMed][CrossRef]

6. Blohm M, Sandblom G, Enochsson L et al. Relationship between surgical volume and outcomes in elective and acute cholecystectomy: nationwide, observational study. Br J Surg 2023; 110: 353–61. [PubMed][CrossRef]

7. Nasjonalt servicemiljø for medisinske kvalitetsregistre. Gastronet. https://www.kvalitetsregistre.no/registeroversikt/gastronet/ Accessed 19.1.2026.

8. Lassen K, Nymo LS, Havnes K. NORGAST. Norsk register for gastrokirurgi. https://www.unn.no/498a80/siteassets/documents/kvalitetsregistre/norsk-register-for-gastrokirurgi/registerbeskrivelse-og-brukermanual-norgast-2023.pdf Accessed 19.1.2026.

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