

Surgery to treat gallstones and acute inflammation of the gallbladder

A systematic review and assessment of the social, medical, economic and ethical aspects

SBU ASSESSMENT | ASSESSMENT OF METHODS IN HEALTH CARE AND SOCIAL SERVICES

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Executive summary

Conclusions

- ▶ It is unclear whether patients experiencing a gallstone attack should receive surgical treatment or not. The scientific basis to assess this is insufficient and better studies are needed.
- ▶ The body of evidence is currently insufficient to determine whether it is better to always surgically treat acute inflammation of the gallbladder. More well conducted studies are needed.
- Patients with acute inflammation of the gallbladder can be surgically treated in the acute phase, within a few days of symptom debut, without increasing the risk for complications (compared to when the surgery is done later in an asymptomatic stage). Increasing the number of surgeries performed during the acute phase could free resources for the health care system. Just over 60% of surgeries for acute inflammation of the gallbladder are currently performed during the acute phase. SBU estimates that increasing acute phase surgeries to 90% could free three in-hospital days per patient, or about 3300 days per year (corresponding to nearly 26 million Swedish crowns yearly). What is more, patients who receive acute phase surgery are spared experiencing additional pain and suffering while they wait for their operation.
- ▶ The risk for complications is reduced when patients with acute inflammation of the gall-bladder are treated using laparoscopic surgical techniques compared to open surgery techniques.

Background

The treatment of patients with symptomatic gallstones and acute inflammation of the gallbladder (cholecystitis) varies in Sweden.

Objectives

The objective of this report was to investigate the following questions:

- Is it better for patients experiencing a gallstone attack, who demonstrably have gallbladder stones, to be treated surgically or can treatment be deferred unless symptoms recur?
- Is it better for patients with acute inflammation of the gallbladder (acute cholecystitis), to be treated surgically or can treatment be deferred unless symptoms recur?
- Is it better for patients with acute inflammation of the gallbladder to be surgically treated in the acute phase, or should the surgery be scheduled for a time after the inflammation has gone down?
- Is it better for patients with acute inflammation of the gallbladder to be surgically treated using laparoscopic or open surgical techniques?

Methods

A systematic review of the clinical, health economic, ethical and social aspects has been undertaken. The evidence was rated according to GRADE.

Evidence gaps

- We do not know how many people in Sweden have gallstone disease.
- We do not know if all patients who have symptomatic gallstones or acute inflammation of the gallbladder need to be treated surgically. Many patients who are managed conservatively, i.e. without surgical treatment, never return to the health care services for further treatment of their gallbladder disease. We do not know, however, if those who do return end up with a more severe disease progression, or if they have an increased risk to experience complications; considerations that could counterbalance the benefit to those who are not surgically treated and do not return for treatment at a later date.

Ethical and social aspects

There are no major ethical issues with surgical treatment for gallstones or acute inflammation of the gall-bladder, as it is done in Sweden today. It remains to be determined whether all patients with gallstones or acute inflammation of the gallbladder should be surgically treated, or whether conservative management, that does not include surgery, is safe and effective.

The Swedish health care system has already begun to provide surgical treatment for patients with acute inflammation of the gallbladder sooner after symptom debut, and to increasingly provide the surgery in the form of outpatient care. Both of these trends are expected to help free up resources in the future.

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