

GUIDELINES & PROTOCOLS

ADVISORY COMMITTEE

Gallstones – Treatment in Adults

Effective Date: July 15, 2007

Scope

This guideline provides recommendations for the management of asymptomatic and uncomplicated symptomatic gallstones in adults.

RECOMMENDATION 1 **Asymptomatic gallstones**

Surgical consultation and surgery are not recommended for adults who have asymptomatic gallstones, found incidentally by diagnostic imaging or abdominal surgery.

RECOMMENDATION 2 **Symptomatic gallstones**

a) Surgical intervention

If a patient with symptomatic gallstones strongly indicated a desire/preference for preventing recurrent pain, surgical removal of the gallbladder may be considered. About 50 percent of patients will experience the recurrence of gallstone-related pain within 1 year if left surgically untreated.¹ Laparoscopic cholecystectomy is recommended in symptomatic patients who are suitable candidates for surgery and who wish to have surgical intervention.

b) Non-surgical management

- (i) Oral bile acids are rarely indicated for dissolution therapy in patients who are unsuitable for, or who decline, surgery.
- (ii) Lithotripsy is not indicated for the primary treatment of simple gallstone disease.

Rationale

Gallstones are common in western society. The prevalence is higher in women and increases with age.^{2,3}

Other risk factors for gallstone formation include:

- Pregnancy
- Aboriginal heritage
- Family history
- Obesity
- Rapid weight loss
- Ileal disease/resection
- Long-term total parenteral nutrition
- High-dose estrogen therapy

Note: Diabetes mellitus and oral contraceptives are strongly associated with, but are not conclusively proven to cause, gallstones³

Most gallstones are asymptomatic and remain so for the life of the patient.^{2,4-6} Complications or symptoms will develop in one to two per cent of patients per year. It also appears that the longer the stones remain quiescent, the less likely complications appear.

Surgery is not indicated in asymptomatic patients.⁵⁻⁷ Some exceptions include patients with sickle cell disease and gallstones, and patients with calcified (“porcelain”) gallbladders where the risk of gallbladder cancer is high.^{5,6,8} Prophylactic cholecystectomy has previously been recommended in diabetic patients in order to avoid the high morbidity and mortality rates associated with emergency operations. However, the increased risks are due to cardiovascular disease and other comorbid conditions which are present whether the surgery is elective or emergency. Therefore, asymptomatic patients with diabetes should not have prophylactic surgery.⁵

There is sometimes confusion about which symptoms are caused by gallstones. Symptoms such as “indigestion” and “abdominal discomfort” have equal incidence in patients with and without gallstones.^{4,6} Biliary pain typically presents as discrete episodes of right upper-quadrant pain and may last for hours. Only symptoms directly attributable to gallstones will resolve with surgery.^{6,9} The presence of mild or occasional symptoms does not connote significantly increased risk for complications compared to asymptomatic patients. Therapeutic decisions should be based on symptoms, and not on the number or size of gallstones.

Laparoscopic cholecystectomy is now the standard approach to the treatment of symptomatic gallstones.

References

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Sponsors

This guideline was developed by the Guidelines and Protocols Advisory Committee, and supercedes the guideline *Treatment of Gallstones in Adults* (September 2001). This guideline has been approved by the British Columbia Medical Association and adopted by the Medical Services Commission.

This guideline is based on scientific evidence current as of the Effective Date.

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The principles of the Guidelines and Protocols Advisory Committee are:

- to encourage appropriate responses to common medical situations
- to recommend actions that are sufficient and efficient, neither excessive nor deficient
- to permit exceptions when justified by clinical circumstances.

Associated Document

Patient Guide: Gallstones – Treatment in Adults.

Gallstones – Treatment in Adults

A GUIDE FOR PATIENTS

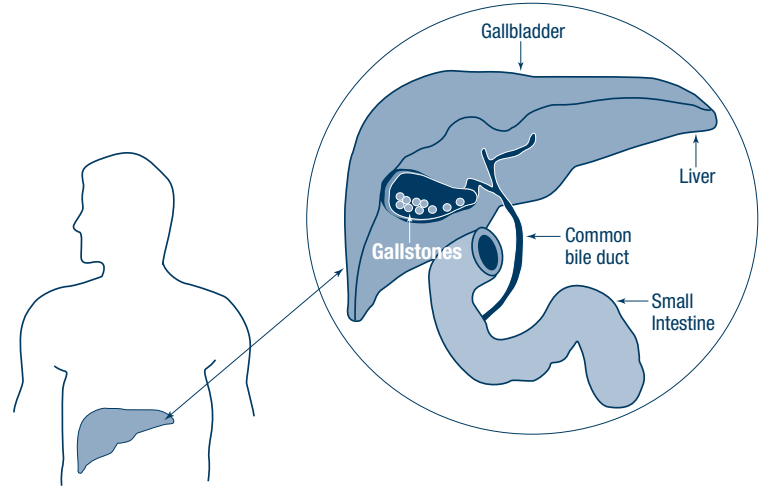
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What does the gallbladder do?

The gallbladder is a small, hollow organ located in the right side of the abdomen under the liver. The gallbladder stores and concentrates bile which is produced in the liver. Bile is used to digest and process food. When needed, the gallbladder releases bile through a small tube called a bile duct into the small intestine.

What are gallstones?

Gallstones form in the gallbladder. Most are composed of cholesterol and can vary in size and number. Most gallstones do not cause symptoms or problems. Sometimes gallstones will irritate the gallbladder or block the bile duct, causing pain.



What is the treatment for gallstones?

If your gallstones are not causing pain, treatment is not recommended. If you develop symptoms from your gallstones, consult your physician.

If you have mild infrequent symptoms from your gallstones, you may safely wait to see if your symptoms worsen. With more frequent or severe symptoms, you may wish to consider surgical removal of the gallbladder. Simply removing the stones without removing the gallbladder is not an adequate long-term treatment because of recurrence.

Surgical removal of the gallbladder is called cholecystectomy. Laparoscopic cholecystectomy is the removal of the gallbladder through a number of small incisions in the abdomen. The operation requires a general anaesthetic. Removal of your gallbladder should have little effect on your lifestyle or diet.

In rare cases when an individual cannot safely have surgery, non-surgical methods may be considered. However, gallstones commonly recur after non-surgical treatment.

As with all treatments, there are both benefits and risks. You should discuss your options with your doctor.

Resources

British Columbia Ministry of Health Web site:

www.BCGuidelines.ca

BCHealthguide Web site:

www.bchealthguide.org (search word: gallstones)

BC NurseLine:

- Toll-free in BC 1 866 215-4700
- In greater Vancouver 604 215-4700
- Deaf and hearing impaired 1 866 889-4700