Hertfordshire and West Essex Integrated Care System

NHS Hertfordshire and West Essex Integrated Care Board

Evidence Based Intervention

Cholecystectomy

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Policy Statement – Cholecystectomy

Rationale

This policy is a local supplement to the national EBI programme policy on Cholecystectomy see https://ebi.aomrc.org.uk/ which addresses the timing of cholecystectomy (immediate/index or delayed/interval). This local policy outlines the criteria for cholecystectomy.

Two thirds of the patients diagnosed with gallstones are silent and without biliary symptoms. Most patients with symptomatic gallstones present with a self-limiting attack of pain that lasts for a few hours.

Prophylactic cholecystectomy is a surgical procedure to remove gallbladder in patients with silent gallstones to prevent risk of developing biliary colic or other biliary symptoms and its associated complications.

Evidence suggests that cholecystectomy for silent gallstones is limited and suggests that surgery confers no benefit to the patients and the risks of surgery outweigh the complications of gallstones [3,4].

Cholecystectomy is recommended in symptomatic patients with cholecystitis, cholangitis, recurrent biliary colic and after gallstone pancreatitis. For patients with symptomatic common bile duct (CBD) stones It may be combined with Endoscopic retrograde cholangiopancreatography (ERCP) or surgical bile duct exploration.

The laparoscopic approach to cholecystectomy should be considered the standard procedure and provided as a day care surgery.

A single stage laparoscopic cholecystectomy & laparoscopic bile duct exploration (LBDE) should be considered as it is offers improved resource utilisation, reduced costs and lower length of stay compared to a two-stage ERCP and laparoscopic cholecystectomy strategy.

At present there is no evidence to show any benefits of single-incision laparoscopic cholecystectomy (SILS) or natural orifice translumenal endoscopic surgery (NOTES) other than the reduction in the number of incisions used. A case for robotic surgery in cholecystectomy has not been demonstrated [5].

Early laparoscopic cholecystectomy is advocated for patients with acute cholecystitis because surgery for these patients may be challenging and can be associated with a higher incidence of complications (particularly beyond 96 hours) as well as a higher conversion rate from laparoscopic surgery to open surgery.

Numerous studies and literature reviews have shown that index cholecystectomy for mild pancreatitis is preferable to interval cholecystectomy. Compared with interval cholecystectomy, index cholecystectomy reduced the rate of recurrent gallstone-related complications in patients with mild gallstone pancreatitis, with a very low risk of cholecystectomy related complications. In patients with mild biliary pancreatitis, same admission cholecystectomy reduces the rate of recurrent gallstone-related complications significantly from 17% to 5%. The readmission rate for gallstone related complications (pancreatitis, cholangitis, cholecystitis, choledocholithiasis or gallstone colic) is reduced in index versus interval cholecystectomy. It is recognised that index cholecystectomy can be more technically challenging due to inflammation, however, the immediate complication rate of the surgery (i.e., bile leak, wound infection) has been shown to largely similar between index and interval cholecystectomy.

In patients with moderate to severe acute cholecystitis (using the Tokyo Guidelines 2018 definitions) there may be an increased risk of bile duct injury. In patients with severe acute biliary pancreatitis, surgical intervention may be required for other sequalae of the pancreatitis and therefore cholecystectomy should be undertaken once the patient has recovered from any organ failure and when it is clear if any other intervention is required, for example for acute fluid collections or pancreatic necrosis [2].

Recommendations

- Reassure people with asymptomatic gallbladder stones found in a normal gallbladder and normal biliary tree that they do not need treatment unless they develop symptoms.
- When surgery is indicated, the approach should be laparoscopic unless exceptionality can be provided e.g., multiple previous laparotomies, stoma in the right upper quadrant.
- Elective procedures should be performed as day cases where possible.
- Offer bile duct clearance and laparoscopic cholecystectomy to people with symptomatic or asymptomatic common bile duct stones [1].
- For patients who are admitted with acute cholecystitis or mild gallstone pancreatitis, index laparoscopic cholecystectomy should be performed within that admission to prevent further potentially fatal attacks. If the patient is fit enough for surgery and same admission cholecystectomy will be delayed for more than 24 hours, it may be reasonable to make use of a virtual ward, where the patient can return home under close monitoring prior to undergoing surgery as soon as possible [2].
- For patients with calculus of gallbladder with acute cholecystitis, procedure should be carried out within 1 week of diagnosis [1], but preferably within 72 hours. These patients should be operated on by surgeons with experience of operating on patients with acute cholecystitis, or if not available locally, transfer to a specialist unit should be considered. Timely intervention is preferable to a delayed procedure, and, if the operation cannot be performed during the index admission it should be performed within two weeks of discharge [2].

Cholecystectomy will be funded for patients with:

- 1. Calculus of gallbladder with acute cholecystitis (K80.0)
- 2. Calculus of gallbladder with other cholecystitis (K80.1)
- 3. Calculus of bile duct with cholangitis (K80.3)
- 4. Calculus of bile duct with cholecystitis (K80.4)
- 5. Calculus of gallbladder with impacted Gallstone or Recurrent Biliary Colic (K80.2)
- 6. After pancreatitis, if appropriate (K85.x).
- 7. Previous percutaneous cholecystostomy once they are well enough for surgery [1]

***Prophylactic cholecystectomy for patients with silent (asymptomatic) gallstones* will only be funded if the patient <u>also</u> has at least one of the following criteria:**

1. Clear evidence of being at risk of gallbladder carcinoma:
   a. With family history of gallbladder carcinoma
   b. With single solitary gallstone of > 3 cm size.
   c. With porcelain gallbladder.
   d. Gallbladder polyps > 10 mm size.
2. Sickle cell disease or other chronic haemolytic disease
3. Immunocompromised or transplant recipient
4. Patient is undergoing abdominal surgery for other indications (e.g., cirrhosis of the liver or other gastro-intestinal indications)
5. Patient with increased risk of developing complications (with non-functioning gallbladder, gallstones >2 cm size, choledocolithiasis and obstructive jaundice.
6. People with complex diabetes (uncontrolled glycaemia, diabetes with co-morbidities such as heart failure, renal failure, circulatory problems) .

<u>NOTE:</u>

This policy will be reviewed in the light of new evidence or new national guidance, e.g., from NICE.

OPCS Codes:

Code	*Procedure name*
J18.1	Total cholecystectomy and excision of surrounding tissue
J18.2	Total cholecystectomy and exploration of common bile duct
J18.3	Total cholecystectomy NEC
J18.4	Partial cholecystectomy and exploration of common bile duct
J18.5	Partial cholecystectomy NEC
J18.8	Other specified excision of gall bladder
J18.9	Unspecified excision of gall bladder

Glossary

Asymptomatic gallstones/ asymptomatic common bile duct stones - Stones that are found incidentally, as a result of imaging investigations unrelated to gallstone disease in people who have been completely symptom free for at least 12 months before diagnosis.

Cholangitis – Inflammation of the bile ducts

Choledocholithiasis - Gallstones in the bile duct

Index cholecystectomy – Removal of the gallbladder at the time of acute admission

Interval cholecystectomy – Removal of the gallbladder performed some weeks after the initial acute presentation.

Laparoscopic cholecystectomy - Removal of the gallbladder through 'keyhole' surgery

Percutaneous cholecystostomy - A procedure to drain pus and fluid from an infected gallbladder.

Porcelain gallbladder - Calcified gallbladder

References

1. NICE, Gallstone disease: diagnosis and management: Clinical guideline [CG188], 2014. Available at: https://www.nice.org.uk/guidance/cg188/evidence/full-guideline-pdf-193302253
2. Academy of Medical Royal Colleges, Cholecystectomy, 2020. Available at: https://www.aomrc.org.uk/ebi/clinicians/cholecystectomy/
3. *World Gastroenterology Organisation Practice Guideline. Available at: http://www.worldgastroenterology.org/assets/downloads/en/pdf/guidelines/10_gallstone_en.pdf*
4. Gurusamy KS, Samraj K. Cholecystectomy for patients with silent gallstones. Cochrane Database of Systematic Reviews 2007, Issue 1. Available at: https://www.cochrane.org/CD006230/LIVER_no-evidence-to-assess-surgical-treatment-in-asymptomatic-gallstones
5. *Royal College of Surgeons. Commissioning Guide: Gallstone Disease. 2016*

Human Rights and Equalities Legislation has been considered in the development of this policy.

Patients who are not eligible for treatment under this policy may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. Individual cases will be reviewed as per the ICB policy.

Change History:

Version	Date	Reviewer(s)	Revision Description

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