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| **2Q — Cholecystectomy** |
| **Summary of Intervention** |
| Cholecystectomy is a surgical procedure that removes the gallbladder.  The gallbladder in an organ located just below the liver on the right side of the body. It is usually performed laparoscopically (keyhole), but can be performed open, which involves a large cut under the right rib cage. A cholecystectomy can be performed for numerous indications, two of which are gallstones or gallstone pancreatitis.  An interval cholecystectomy is one that is performed some weeks after the initial acute presentation, while an index cholecystectomy is one that is performed at the time of acute admission.  **This guidance applies to adults aged 19 years and over.** |
| **Number of interventions in 18/19** |
| **2,056** |
| **Proposal** |
| For patients who are admitted to hospital with acute cholecystitis or mild gallstone pancreatitis, index laparoscopic cholecystectomy should be performed within that admission. These patients should have their gallbladders removed, ideally before discharge, to avoid further delay and 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.  Otherwise patients diagnosed with acute cholecystitis should have their laparoscopic cholecystectomy on the same admission within 72 hours (NICE guidelines published in October 2014 state one week, but 72 hours is  preferable). This guidance may not be applicable in patients with severe acute pancreatitis.  Surgery for these patients may be challenging and can be associated with a higher incidence of complications (particularly beyond 96 hours) and a higher conversion rate from laparoscopic surgery to open surgery. 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. |
| **Rationale for Recommendation** |
| 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. |
| **References** |
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