Timing for laparoscopic cholecystectomy in gallstone pancreatitis and its outcome in a district general hospital.

D Sidloff, F Saddington, E Fine, J Sturt and C Liao
Southend University Hospital NHS Foundation Trust, Prittlewell Chase, Westcliff-on-Sea, Essex, SS0 0RY

Introduction
The incidence of acute pancreatitis in south east England appears to be rising. Its incidence ranges in the UK from 150 to 420 cases per million population.

50% are related to gall stone disease, 20–25% are related to alcohol abuse.

About 20 to 30 percent of patients with acute pancreatitis develop complications.

There are generally two approaches that concern proper timing:
• Postponing laparoscopic cholecystectomy 6 to 8 weeks which may reduce the acute inflammation, making it easier to perform laparoscopic cholecystectomy and possibly lowering the conversion rate.
• Performing laparoscopic cholecystectomy during the first admission after clinical improvement may reduce the incidence of recurrent attacks of acute pancreatitis, morbidity, and hospital expenses

One recent large multi-centre study on the timing of cholecystectomy in gallstone pancreatitis found that 13.7 per cent of patients were readmitted for biliary events when cholecystectomy was performed at a median of 6 weeks after discharge. This included an almost 10 % risk of recurrent pancreatitis.

The UK Working Party on Acute Pancreatitis felt strongly that definitive treatment should not be delayed more than two weeks after discharge from hospital, and that it is preferable to achieve this during the same admission to avoid potential delay

There is evidence to suggest that early cholecystectomy might even be associated with a less difficult dissection than delayed cholecystectomy.

Despite this early cholecystectomy (< 2 weeks) is performed in only a minority of patients in the UK.

Methods
• We analysed data recorded prospectively over sixteen months (March 2010 – June 2011) of patients admitted with acute pancreatitis in a single institution. We did this using an in house database.
• A diagnosis of pancreatitis was based on clinical symptoms, raised enzymes and imaging.
• Timing of laparoscopic cholecystectomy, recurrent-biliary events and admissions before and after cholecystectomy were evaluated using in house theatre and imaging systems.

Results
Altogether we admitted 177 patients over sixteen months.

The majority of these patients were admitted secondary to gallstone disease.

19% of these patients had an early laparoscopic cholecystectomy.

10% incidence of readmission with acute pancreatitis if delayed more than two weeks (risk ratio = 1.02)

Causes of Pancreatitis in a district general

<table>
<thead>
<tr>
<th>Cause of Pancreatitis</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallstone</td>
<td>47</td>
</tr>
<tr>
<td>Alcohol</td>
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</tr>
<tr>
<td>Hyperlipidaemia</td>
<td>3</td>
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<tr>
<td>Steroids</td>
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<tr>
<td>Anti T.B medications</td>
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<tr>
<td>Idiopathic</td>
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</tr>
</tbody>
</table>

Cause of pancreatitis

Timing to Laparoscopic Cholecystectomy

Conclusion
In line with national statistics our results showed about half of patients admitted with acute pancreatitis were secondary to gallstone disease.

Our results confirmed that 1 in 10 patients not treated with early laparoscopic cholecystectomy were readmitted with complications of acute pancreatitis.

Our results confirm that despite multi center data regarding the timing of laparoscopic cholecystectomy post pancreatitis, delayed cholecystectomy is still common in the UK.

A delay of more than two weeks in performing laparoscopic cholecystectomy for biliary pancreatitis carries a higher risk of readmission with acute pancreatitis, and other associated biliary events. Further study with a higher number of cases is required to substantiate this finding.

Limitations
• The internal database of admissions relies on accurate coding
• Small sample of patients

References