Forenames **Lastname** **Hospital No.** **D.O.B.**	St Helens and Knowsley Teaching Hospitals NHS Trust **SDEC management of RUQ pain**

Right upper quadrant pain/gallstones SDEC pathway

The acute onset of severe right upper quadrant pain most commonly is associated with the presence of gallstones. Patients present acutely with severe right upper quadrant pain which lasts several hours with minimal systemic upset (biliary colic) or more prolonged pain associated with localised gallbladder inflammation and systemic symptoms (acute cholecystitis). Both of these conditions are referred to as **simple acute biliary disease**.

Patients in whom the severe pain is associated with jaundice and biliary dilatation or gallstone pancreatitis are regarded as having a **complex biliary presentation** and are managed according to a different pathway.

Initial assessment and diagnosis

History: Typical clinical features will include right upper quadrant pain, nausea, vomiting, tachycardia and sometimes a pyrexia.

Examination: Tenderness may be present on examination in the right upper quadrant.

Diagnostics: Initial blood tests should be performed. Ultrasound findings together with the liver function tests allow an initial triage of acute biliary patients into one of four categories:

- Biliary colic – short duration of pain, minimal systemic upset, normal liver function tests, no biliary dilatation on ultrasound
- Acute cholecystitis – pain for over 24 hours, systemic upset (pyrexia, tachycardia), raised white cell count, oedematous thick-walled gallbladder, often with stone stuck in neck on ultrasound (with normal liver function tests unless Mirizzi syndrome)
- Complex biliary disease – variable duration of pain, systemic upset possibly including rigors, pyrexia, deranged liver function tests and dilated biliary tree on ultrasound. High suspicion of gallstones being present in the common bile duct in addition to the gallbladder
- Gallstone pancreatitis – periumbilical pain that radiates to the back of variable duration and intensity, systemic upset, raised amylase or lipase. May have deranged liver function tests and inflammatory markers. USS may reveal a dilated biliary tree.

Patients with biliary colic are suitable for same day emergency care. If the severe pain has settled patients may be either:

a) Discharged to have an early outpatient ultrasound with follow up in general surgical clinic. Most patients who are medically fit will be offered an elective laparoscopic cholecystectomy (within 6 weeks ideally) after one severe attack of biliary colic as the likelihood of symptomatic recurrence is high.

b) Proceed after ultrasound to acute inpatient cholecystectomy.

Patients with acute cholecystitis on ultrasound scan should be admitted to hospital to have fluid resuscitation, antibiotics and analgesia. Treatment options in this situation are either:

a) conservative management followed by elective cholecystectomy

Or,

b) early cholecystectomy during the first admission, particularly if the pain is of less than 5 days duration (scheduled hot GB lists) .

Patients with complex biliary disease should be admitted to hospital and treated with analgesia, antibiotics and fluids.