**Project Title:** Definitive assessment of the role of intraoperative cholangiogram (IOC) during laparoscopic cholecystectomy in preventing future problems associated with choledocholithiasis (common bile duct stones)  

**Code:** NCS9

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<th>Host School/ Institute</th>
<th>Address: Upper GI Surgical Unit Level 8A, Acute Services Building Royal North Shore Hospital E25, St Leonards, NSW 2065</th>
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<td>Northern Clinical School</td>
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**Project Type:** Data Analysis, Clinical

**Project Category:** Surgery, Hepatology/ Gastroenterology

**Project Keywords:**  
1. Long term follow-up of missed CBD stones  
2. Routine versus selective IOC  
3. ERCP treatment of missed CBD stones after lap cholecystectomy

**Project Description:**

**Aims:** The primary aim is to investigate whether performance of an intraoperative cholangiogram (IOC) at the time of cholecystectomy prevents future complications of unsuspected or undetected CBD stones. The secondary aim is to determine the relationship between a previous cholecystectomy and late presentation to Endoscopic Retrograde Cholangiopancreatography (ERCP) for management of CBD stones.

**Background:** Common bile duct stones (choleodocholithiasis) mostly originate from the gallbladder and may be found or suspected prior to cholecystectomy when there are abnormal liver function tests (LFT’s), a history of jaundice or pancreatitis, or when imaging shows a dilated extra-hepatic biliary tree or an obvious stone in the distal CBD. Unsuspected CBD stones are thought to occur in 2-10% of all patients undergoing laparoscopic cholecystectomy. Although there are some studies of untreated CBD stones that suggest these patients do not develop complications (cholangitis or pancreatitis) long term, there is no consensus whether this is safe.

This project has not been undertaken before and there is a pressing need for good evidence in the literature about this issue. Findings from this study are likely to have a major impact on the debate about the role of “routine” or “selective” IOC during laparoscopic cholecystectomy.

**Research Plan**

To identify approximately 200 patients who have undergone ERCP for stone extraction and who had a prior cholecystectomy (open or laparoscopic). All operation reports and follow-up information will be collated. The main outcomes will be whether an IOC was done at the time of cholecystectomy, and the results of this cholangiogram. If possible, the original IOC films will be reviewed to ensure it was of adequate quality and that it was interpreted correctly. It will also be noted whether a cholecystectomy was done without an IOC. Statistical analysis between variables will then be conducted to describe any significant correlations.