

Surgery guided by ICG (Indocyanine green) enhanced fluorescence

Clinical question, PICOS and Search Strategy

Setting: Cholecystectomy

Clinical question: **Would indocyanine green - enhanced fluorescence surgery, rather than surgery without fluorescence - improve the outcome of patients after cholecystectomy?**

P = Population or Patient group: patients who underwent standard, laparoscopic or robotic surgery (**cholecystectomy for symptomatic lithiasis or/and cholecystitis**)

I= Intervention: surgical procedure (standard, laparoscopic, robotic) with fluorescent properties of indocyanine green (ICG)

C= Comparator: surgical procedure (standard, laparoscopic, robotic) without fluorescent properties of indocyanine green (ICG)

O = Outcomes: mortality, morbidity, operating time, re-operation, re-admission

S = Study design

- Primary research: randomised controlled trials (RCTs), controlled cohort studies, case control studies
- Secondary research: systematic reviews and meta analysis

Keyword A	Indocyanine Green				
Keyword B	ICG				
Keyword C	Fluorescence Cholangiography				
Keyword C	Image-guided surgery		Cholecystectomy		
Search strategy	Indocyanine Green	OR	ICG	OR	Fluorescence Cholangiography
OR	Image-guided surgery	AND	Cholecystectomy		

Search methods for identification of studies: all sources searched, including: databases, trials registers, websites and grey literature; all types of studies included: case series, clinical trials, review and meta-analysis – English language only

Search Strategy Pubmed

(((((cholecystectomy OR cholecystectomy[MeSH Major Topic])) OR (("Bile Ducts/surgery"[Mesh] OR "bile duct injury" OR "bile duct injuries")))) AND (((((((("Indocyanine Green"[Mesh] OR "Fluorescent Dyes"[Mesh] OR "indocyanine green" OR wofaverdin OR vophaeverdin OR fluorescen* OR cw800*)) OR ("near infrared fluorescence" OR "near infrared fluoresce imaging")))))

Search Strategy Embase

('cholecystectomy'/exp OR 'bile duct surgery'/exp OR 'gallbladder surgery'/exp OR 'ileostomy'/exp OR 'bile duct injury'/exp OR cholecystect*) AND ('laparoscopy'/exp OR laparosc* OR laparoendosc* OR celioscop* OR 'minimally invasive surgery'/exp OR 'robotic surgical procedure'/exp)) AND ('indocyanine green'/exp OR 'fluorescence'/exp OR indocyan* OR wofaverdin* OR fluorescen* OR fluorescein* OR icg OR icgfa OR 'fluorescent dye'/exp)