

Safe Laparoscopic Cholecystectomy- Working Towards A Vision Of Zero Bile Duct Injury

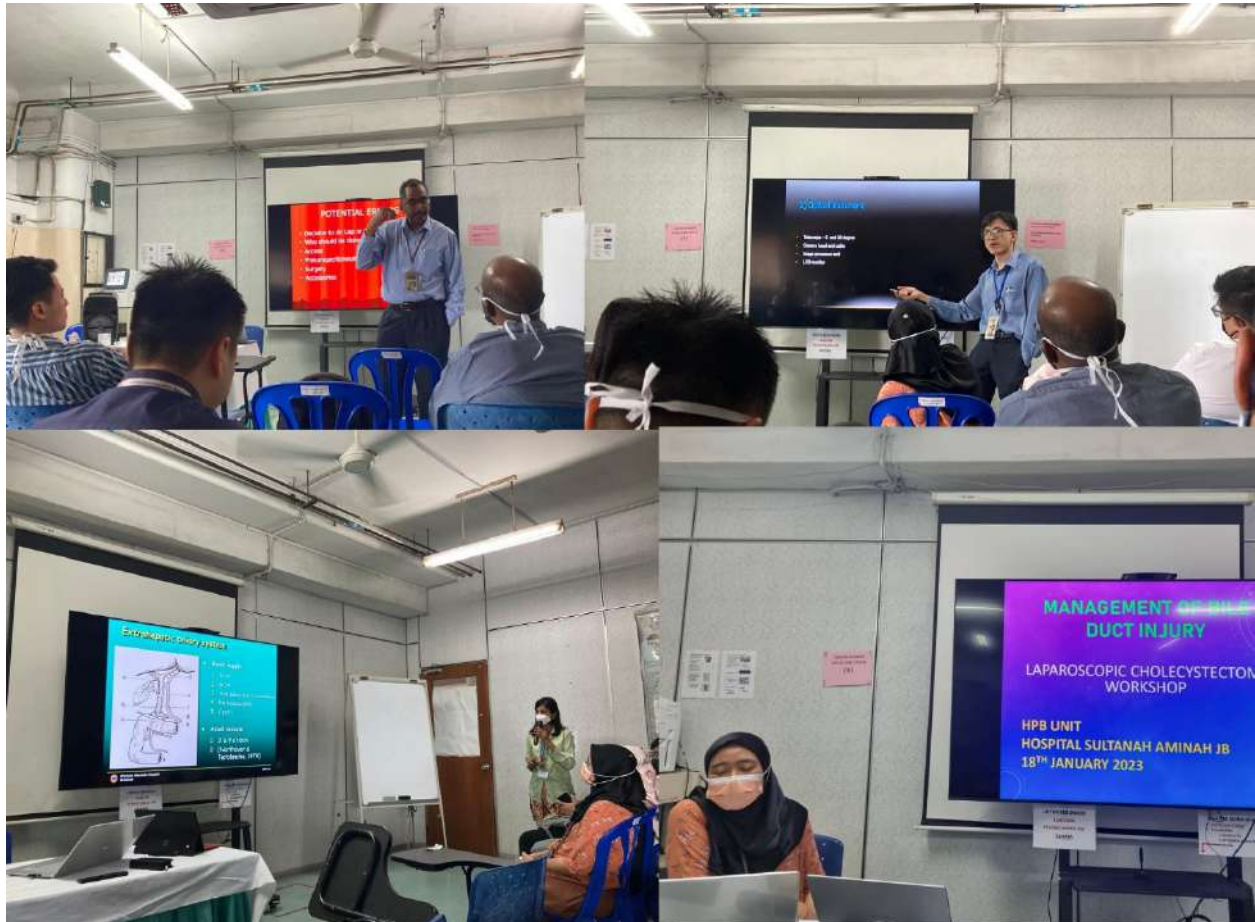
A Brief Narrative by Dr(Mr) Tan JH and Dr(Mr) Novinth – General Surgeons of Hospital Sultanah Aminah JB

Laparoscopic cholecystectomy is one of the most common minimal access procedures performed by general surgeons. Hence, it is imperative that this surgery is done seamlessly while keeping the complications rate next to none. One of the complications that is dreaded upon the most is bile duct injury (BDI) of varying degrees. However, the finer details of this procedure, especially the tips and tricks to ensure a safe dissection are less often discussed during the formative years of general surgical residency. In our effort to promote a culture of safe laparoscopic cholecystectomy, the Surgical Department and Hepatopancreaticobiliary Unit of Sultanah Aminah Hospital conducted a two-day laparoscopic cholecystectomy workshop on 18th & 19th Jan 2023 at Hospital Sultanah Aminah, Johor Bahru. It included didactic lectures on the first day followed by hands-on workshop under direct supervision on day two. The cohort was comprised of in-house general surgeons and one surgeon from Segamat.

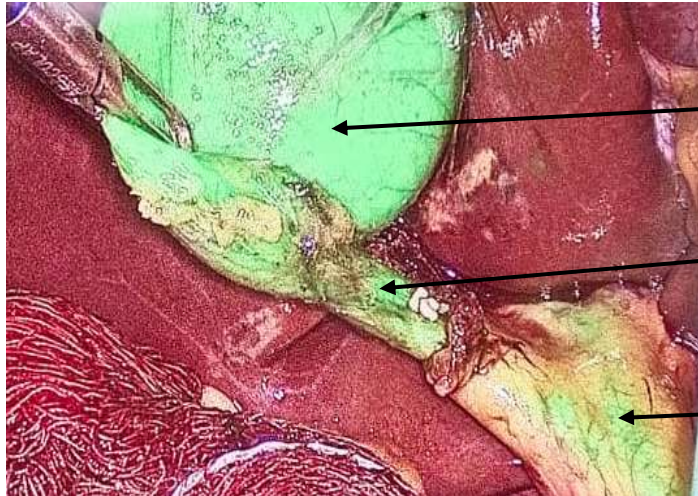
The lectures focused on hepatobiliary surgical anatomy, basics of laparoscopy, operative details of cholecystectomy, errors in cholecystectomy, classification, and management of bile duct injuries.

The facilitators for the inaugural workshop were Mr Manisekar(chief guest and lead facilitator), Ms Kharlina(HPB consultant), Mr Jonathan (HPB fellow) and Ms Anuradha(HPB fellow). Under direct supervision and guidance from the trainers, the participants could complete a total of 11 cases of laparoscopic cholecystectomy in the one-day hands on session in a timely fashion without any intraoperative complications. During this training, we utilized both the fluorescent cholangiography using indocyanine green (ICG) and intraoperative cholangiogram (IOC). With the usage of ICG, the anatomy of the extrahepatic biliary tract was well demonstrated. As an effect, the participants had increased levels of confidence during the dissection of the hepatocytic triangle as the location of CBD in relation to the cystic duct and gall bladder was clearly visualized. All candidates were able to perform and interpreted performed IOC with no glitches. One of the patients had a common bile duct stone demonstrated during intraoperative cholangiography even though pre-operative imaging and liver function tests suggested otherwise. This highlights the importance of incorporating IOC as a routine endeavor rather than employing it selectively. The workshop was concluded with a short closing ceremony and presentation of certificates to the participants and tokens of appreciation to the facilitators. Last but not the least, we would like to thank the educational committee of our industry partners, Umami Medical(ICG-enabled laparoscopic system and the ICG dye) and Medtronic (curved Soniccision energy device and endo-pouch) for the immense support rendered for the success of this event.

We hope that this would be a stepping stone for future workshops of similar nature in the Southern region of Peninsular Malaysia.







Gall bladder

Cystic Duct

Common Bile Duct







