P-BN59  Danger is there, do we want to know about it? Routine intra operative cholangiography highlights dangerous biliary anatomy for safer cholecystectomy

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Background: Normal biliary anatomy is uncommon. Different classification for biliary anatomy has been described, with Huang Types A4 & A5 of great interest for laparoscopic cholecystectomy (LC) due to the proximity of aberrant bile duct to Cystic duct (CD). These types of dangerous anatomy might contribute to bile duct injury. This study aims to analyse the prevalence of dangerous biliary anatomy.

Methods: Prospectively collected data for all patients who underwent laparoscopic cholecystectomy was analysed. All LC were performed by single surgeon or under his direct supervision, between 01/07/2020 and 20/08/2021. Index admission and single session management of cholecystolithiasis disease with routine Laparoscopic cholecystectomy +/- intra operative cholangiography (IOC) +/- LCBD exploration were standard practice.

Results: Laparoscopic cholecystectomy was performed in 137 patients. Mean age was 56y (17-84). 62% were females. 66% of Laparoscopic cholecystectomies were emergency. IOC was performed in 92% of cases. Abnormal biliary anatomy was found in 54% : Huang A1 - 48%, A2 - 29%, A3 - 12%, A4 - 9.7% and A5 - 0.7%.
Dangerous anatomy (A4 and A5) was found in 10.5%, 78% were females. Female with dangerous anatomy were younger than males 49 y, 60y respectively. Nassar difficulty grading for dangerous anatomy was as follows: G2 28%, G3 42% and G3 28%

Abnormal cholangiogram was found in 48%, due to filling defect in 58%, no contrast flow into duodenum in 4%, Cystic duct stone in 4%, and short CD in 8%. CBD stones were treated using transcystic approach in 92% of cases. No intra-operative or post operative complications were recorded for patients with dangerous anatomy.

Conclusions: This study demonstrates that dangerous biliary anatomy, that could lead to bile duct injury is relatively common, occurring in 10.7% of LCs. Routine intra-operative cholangiography highlights these high-risk variations in biliary anatomy and may prevent inadvertent bile duct injury in such cases.