Epidemiological, clinical and endoscopic characteristics of symptomatic choledocholithiasis inpatients underwent endoscopic retrograde cholangiopancreatography; a single centre experience from Northern Sri Lanka

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**Introduction** Symptomatic choledocholithiasis needs urgent attention for stone retrieval. It can lead to biliary sepsis, especially in obstructive cholestasis. Biliary drainage and stone retrieval can be done through open surgical, laparoscopic or endoscopic methods. Literature published on this topic is sparse in Sri Lanka.

**Objective** Epidemiological, clinical and endoscopic characteristics of symptomatic choledocholithiasis was evaluated in patients who underwent endoscopic retrograde cholangiopancreatography (ERCP).

**Methods** A retrospective descriptive study was carried out in the university surgical unit Teaching hospital Jaffna from 2019 to 2021 in patients with symptomatic choledocholithiasis who underwent ERCP. All data pertaining to symptomatic choledocholithiasis were obtained from patients' records.

**Results** Sixty-eight patients were included, 45.6% were males and 54.4% were females. The mean age was 55.51±15.72 years (23- 90 years). All patients had biliary stones secondary to gallstone disease (GSD). Single and multiple stones were found in 51.5% and 48.5% respectively. Among the 39.8% of patients with distal stones, single stones were found in 32.4% (n=22). Complete common bile duct (CBD) clearance was obtained through balloon extraction in 61.8%. A combined method of mechanical lithotripsy and dormia basket method was used in 1.5%. Successful extraction was done in 66.2% and

stones were not found in 14.7% of patients. Biliary stenting was done in 44.1% of patients. Four (5.8%) patients underwent cholecystectomy before ERCP and 45% post-procedural cholecystectomy. No intraprocedural cholecystectomies were performed. All patients had uneventful recovery.

**Conclusion** Most of the biliary stones were single and found in the distal common bile duct. These characteristics are favourable for endoscopic retrieval. Common bile duct clearance could be obtained successfully through the endoscopic method. Further studies are needed to explain the clinical and endoscopic features of symptomatic choledocholithiasis due to the limited number of patients.

Keywords Symptomatic choledocholithiasis, ERCP, Biliary stenting, CBD clearance