

## AB058. P-26. Utility of cholangioscopy-targeted biopsy for diagnosis of biliary neoplasms: experiences from referral hospitals in Eastern and Western countries

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**Background:** Additional to endoscopic retrograde cholangiopancreatography (ERCP), cholangioscopy allows the direct visualization of the bile duct which might improve the diagnosis of the biliary neoplasms. This study aims to evaluate the efficacy and safety of cholangioscopy in conjunction with ERCP for diagnosis of biliary neoplasms including intraductal papillary neoplasm of the bile duct (IPNB) and cholangiocarcinoma.

**Methods:** Endoscopy databases from two referral hospitals, MD Anderson Cancer Center (MDACC), Texas, USA and King Chulalongkorn Memorial Hospital (KCMH), Bangkok, Thailand between 2008–2018 were retrospectively reviewed. Patients with biliary stricture underwent ERCP and cholangioscopy were included.

**Results:** Among 54 patients (MDACC =15 and KCMH

=39) with biliary obstruction who underwent ERCP and cholangioscopy, there were 28 patients diagnosed with biliary neoplasm (cholangiocarcinoma =23 and IPNB =5). Cholangiocarcinoma was diagnosed in 8 patients in MDACC and 15 patients in KCMH. The median ages [range] were 67.5 [54–81] and 71.5 [51–86] years, in MDACC and KCMH, respectively. The tumor locations were in the extra-hepatic bile duct in 4 and 7 patients and peri-hilum in 4 and 8 patients in MDACC and KCMH, respectively. The diagnosis was made by brush cytology, cholangioscopy-targeted biopsy and fluoroscopy-guided biopsy in 0%, 12.5% and 12.5% in MDACC and 13.3%, 53.3%, and 60% in KCMH. With combination, ERCP provided diagnosis in 25% and 80% of cholangiocarcinoma in MDACC and KCMH, respectively. IPNB was diagnosed in 5 patients with the median age of 57 [35–66] years, only in KCMH. IPNB the tumor was located in extrahepatic bile duct and was diagnosed by cholangioscopy-guided biopsy in all patients. There was no post-ERCP complication or procedure-related mortality developed in this study.

**Conclusions:** IPNB was diagnosed in younger age group than cholangiocarcinoma. The median age of cholangiocarcinoma diagnosis was similar between the East and the West. Cholangioscopy-targeted biopsy added on the probability of cholangiocarcinoma diagnosis to the conventional ERCP methods, and it had high performance for diagnosis of IPNB. With the good safety profile, cholangioscopy-targeted biopsy should be used in conjunction with ERCP in patient suspected with cholangiocarcinoma or IPNB.

**Keywords:** Biliary neoplasms; cholangioscopy; biopsy; cholangiocarcinoma; intraductal papillary neoplasm

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