

中文題目：對於中等嚴重度的膽結石膽管炎病人的一階段內視鏡治療，一個經傾向評分匹配分析的回溯性世代研究

英文題目：Single-stage endoscopic treatment for moderate acute cholangitis with choledocholithiasis: A retrospective cohort study after propensity score matching analysis.

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Background

Performing the stone removal with acute cholangitis may increase bleeding and pancreatitis risks in experience. We often perform biliary drainage in acute stage, and arrange 2nd session ERCP for stone removal later. However, there are rarely studies to discuss the efficacy and safety of single-stage endoscopic treatment for acute moderate cholangitis with choledocholithiasis.

Aims

We collect the chart data in our hospital to analyze single stage retrograde endoscopic common bile duct stone removal in moderate cholangitis with choledocholithiasis to determine the safety, successful rate, and complications.

Methods

We performed a retrospective chart review of all consecutive cases (n=632) of ERCP performed for CBD stone extraction from Jan, 2010 to Sep. 2013. The participants were aged 18 years and above. Cases were screened on the following exclusion criteria(n=346): procedural failure requiring an anatomy-modifying procedure, such as a Billroth II subtotal gastrectomy or R-en-Y gastrojejunostomy (n=11); stenosis of the pyloric ring (n=5); tumor-related obstruction (n= 1); treatment requiring only supportive retrograde biliary drainage (n=99); and failure to locate the papilla (n=6); active peptic ulcer bleeding (n=2); intolerance due to inadequate sedation (n=37); CBD stone >1.2cm (n=95); CBD sludge (n=57); non-naïve papilla in ERCP (n=33). There were residual 286 cases for analysis. We conduct NCSS statistical software to randomly match 1:2 ratios on the propensity score together with age and gender and tend to balance all of the observed covariates. The primary outcomes were the rate of success of complete stone removal and occurrence rate of major complications (post-ERCP pancreatitis, perforation, bleeding, pneumonia, and mortality within 30 days of the procedure).

Results

Propensity score matching created sets of participants for moderate cholangitis group (n=91) and none- or mild cholangitis group (n=134). Age, sex, personal habitats (alcohol, smoking), American Society of Anesthesiologists (ASA) score, comorbidities, endoscopic findings and stone size were similar in these two groups. The higher levels of white blood count, prothrombin time, alanine transaminase, bilirubin, *alkaline phosphatase*, *C-reactive protein*, *amylase*, and *lipase* were noted in moderate cholangitis group. Successful rate of complete stone extraction was similar in two groups (89.0% versus 91.0%; p=.614). The complication

rate was also similar between moderate cholangitis group and none- or mild cholangitis group (PEP: 13.1% versus 10.4%, $p=.542$, pneumonia: 4.4% versus 1.5%, $p=.188$, perforation: 0% versus 1.5%, $p=.240$; mortality: 2.2% versus 0.7%, $p=.355$) but there was higher bleeding rate in moderate cholangitis group (3.4% versus 0.0%, $p=.035$).

Conclusion

We conclude that single-stage retrograde endoscopic common bile duct stone removal in moderate cholangitis with choledocholithiasis may be effective with high successful rate(89.0%), but it was accompanied with higher bleeding risk after endoscopic sphincterotomy.