INTRODUCTION

In IDEN 2012, many diverse experiences associated with basic procedures to advanced techniques of endoscopic retrograde cholangiopancreatography (ERCP) were highlighted in great enthusiastic lectures by world renowned experts. Interesting cases entitled “Interesting cases in pancreatobiliary endoscopy” were introduced in video forum. In this highlight summary of interesting presentations, I will present a summarized review about basic procedures of ERCP like balloon dilation for common bile duct (CBD) stones, advanced techniques like endoscopic necrosectomy for necrotizing pancreatitis, recently proposed management for the prevention of post-ERCP pancreatitis, and spyglass system through which we can directly observe the CBD and pancreatic duct.

IS ENDOSCOPIC PAPILLARY LARGE BALLOON DILATION (EPLBD) ALWAYS SAFE?

EPLBD is easy to use and effective for the removal of common bile duct (CBD) stones, but still debates exist on safety issue. Since EPLBD requires only a small endoscopic sphincterotomy (EST) or none at other occasions, EPLBD is generally believed to avoid the complications of a full EST. Lee and Han1 conducted a large retrospective multicenter study, in which a total of 946 consecutive patients with large CBD stones were enrolled in this study. Serious adverse events occurred in 95 patients (10%), after which the following guidelines of EPLBD in order to pursue zero mortality were suggested; 1) EPLBD should be avoided in patients with distal CBD strictures; 2) full EST should be avoided immediately before EPLBD; 3) the balloon should be inflated gradually; 4) inflation should be discontinued in cases of persistent balloon waist (75% rule); 5) not to be inflated beyond the maximum diameter of the dilated CBD; and 6) convert to an alternative stone removal or drainage method any time there is difficulty in removing the stone. Because it was multicenter study analyzing the safety of EPLBD based on large numbers of cases, experienced experts will agree with the above referred recommendations, though it was studied retrospectively.
HOW TO PREVENT POST-ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY (ERCP) COMPLICATIONS?

Kahaleh and Freeman recently made recommendations to minimize risks of ERCP in International Digestive Endoscopy Network (IDEN) 2012 as follows; adequate selection of patients undergoing ERCP, skilled operators using novel techniques for prompt identification, which is key to successful prevention and management. Pancreatitis is the most common complication associated with ERCP procedure with average rate of about 5%. Risk factors for the occurrence of post-ERCP pancreatitis include younger age, indication of suspected sphincter of Oddi dysfunction, history of previous post-ERCP pancreatitis, absence of elevated serum bilirubin levels, and female sex are usually at increased risk. Technique-related issues have long been recognized to be important in causing post-ERCP pancreatitis. He also mentioned about specific techniques to reduce risk of post-ERCP pancreatitis, such as pancreatic stents, more promising pharmacological agents including non-steroidal anti-inflammatory drug, and enema for prevention of post-ERCP pancreatitis.

ENDOSCOPIC NECROSECTOMY: CAN WE DO IT?

New possibility that EUS-guided endoscopic pancreaticobiliary drainage can replace the percutaneous techniques and obviate surgery was shown in IDEN 2012. Kahaleh referred that endoscopic debridement and stent insertion can reduce high morbidity and mortality of surgery in severe necrotizing pancreatitis. Endoscopic necrosectomy using repeats session of debridement and plastic stents insertion has been more frequently used within the last decade and half. Fully covered self-expandable metal stents might provide a safer and more efficient drainage through a larger diameter stent. Additionally he described techniques of transmural drainage and endoscopic debridement, how to make the transenteric access into the pancreatic necrosis, how to make active endoscopic irrigation with a gastroscope and debridement of cystic contents using biopsy forceps, and Roth nets and polypectomy snares in detail. This technique is evolving continuously as we attempt to optimize the post-procedural outcomes.

SPYGLASS DIRECT VISUALIZATION SYSTEM: DOES IT WORK?

There were attractive video lectures during IDEN 2012 dealing with advanced techniques for pancreaticobiliary visualization including direct peroral cholangioscopy, spyglass direct visualization system, forward-viewing echoendoscopy, and contrast-enhanced EUS and elastography accompanied with actual interesting cases for each. Kahaleh mentioned that the single operator cholangioscopy (SOC) system (SpyGlass; Direct Visualization System, Natick, MA, USA) may offer an interesting compromise in terms of size (10 Fr diameter) and complexity of use. SOC is challenged by the size of the biopsy obtained and the stiffness of the forceps (SpyBite; Boston Scientific, Natick, MA, USA) fitting within the working channel of the system. Sensitivity of forceps biopsy through the cholangioscope was far higher for intrinsic (66%) than extrinsic (8%) malignant lesions. Conclusively, SpyGlass (Direct Visualization System) has not only been used as a platform for advanced intraductal imaging with probe based endomicroscopy and SpyGlass-guided stone fragmentation; but also for photodynamic therapy to treat bile duct cancer. SOC can be a great step to realize intraductal visualization as well as therapy, but the best is yet to come.

CONCLUSION

Pancreatobiliary endoscopy is continuously evolving area with new techniques and we attempt to optimize the post-procedural outcomes.

Conflicts of Interest

The author has no financial conflicts of interest.

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