Abstracts

SPYGLASS™ DS CHOLANGIOSCOPY UNDER CONSCIOUS SEDATION FOR TREATMENT OF DIFFICULT STONES – A NORWICH EXPERIENCE

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Introduction The use of Per Oral Cholangioscopy (POC) and subsequent Electrohydraulic Lithotripsy (EHL) under direct visualisation provides a useful adjunct to treat difficult biliary stones when conventional Endoscopic Retrograde Cholangiopancreatography (ERCP) methods have failed. Because of the length and complexity of these cases, a general anaesthetic is often the preferred choice of sedation. Herein, we describe our early experience of using the SpyGlass DS cholangioscopy system (Boston Scientific, Marlborough, MA, USA) in a tertiary centre to treat difficult stones under conscious sedation, assessing whether this affected efficacy and safety of POC.

Methods A retrospective analysis was performed on all cases where POC was used for difficult biliary stones from September 2016 to December 2017 at a teaching hospital. Cases performed under general anaesthesia were excluded. All patients received periprocedural prophylactic antibiotics, usually intravenous Ciprofloxacin 400 mgs. Rectal non-steroidal anti-inflammatory drugs were administered in all patients unless contraindicated and 5 days of oral antibiotics were given after the procedure. Sedation use, success rates and complications were documented.

Results 26 cases were identified, including referrals from other centres. Median age of patients undergoing POC was 77 years old (range 60–95). Patients had a median of 2 previous ERCPs (range 0–11) prior to POC. The median dose of midazolam administered was 4 mg (range 2–9 mg) and of pethidine was 50 mg (range 0–125 mg). None of the patients required the administration of reversal agents (flumazenil or naloxone).

Indications include extrahepatic stones (73%), intrahepatic stones (23%) and cystic duct stone (4%). Successful duct clearance was achieved in 20/26 (77%) cases, with the use of EHL and subsequent extraction balloon. 4/26 cases required additional mechanical lithotripsy post EHL and 1 case required sphincteroplasty.

We did not achieve intended therapy in 6/26 cases. Reasons for this include: partial stone clearance only (3/6), technical difficulty (stones in second order ducts and inability to apply EHL) (2/6) and equipment failure (1/6). With regards to partial stone clearance cases, 1 patient had a successful repeat procedure with EHL, with the other 2 patients awaiting repeat procedures.

There were no complications recorded.

Conclusions Our data of performing POC under conscious sedation has shown success rates in stone clearance and safety comparable to published outcomes of cases performed under general anaesthesia. Conscious sedation for POC remains a viable option, especially in an increasingly high-risk anaesthetic population and where a dedicated anaesthetist is not readily available for such cases.

HIGH STENT MIGRATION RATES DESPITE ANCHORING: A BOURNEMOUTH EXPERIENCE IN BILIARY SELF-EXPANDABLE METAL STENTS

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Introduction Endoscopic biliary drainage is effective in 90 percent of all attempted cases of biliary strictures and 80 percent of malignant biliary strictures. It carries lower morbidity compared to surgical and radiological approaches. Our aim is to review our practice of biliary self-expandable metal stents (SEMs) insertion in a high endoscopy volume district general hospital looking into stent related complications and benign biliary stricture remodelling.

Methods 185 endoscopic retrograde cholangiopancreatography (ERCP) with biliary SEMs insertion were performed in 166 patients at the Royal Bournemouth Hospital between January 2010 and November 2016. We retrospectively reviewed the indications of biliary SEMs insertion, early and late stent related complications. Early complication is defined as adverse events and stent occlusion or migration within the first 7 days of stent deployment.

Results Out of 185 ERCPs, 153 were done in 142 patients with malignant strictures, 27 done in 19 patients with benign strictures and 5 done for 5 patients with indeterminate strictures. 122 uncovered SEMs(UCSEMs) were inserted in malignant strictures whereas 30, 22 and 4 fully covered SEMs (FCSEMs) inserted in malignant, benign and indeterminate strictures respectively. Early complications from SEMs insertion include biliary infection (3.24%), pancreatitis (1.08%), bleeding (1.08%), perforation (0.54%), and failure of initial ERCP requiring repeat procedure (1.08%) across all biliary strictures. Rate of stent dysfunction in UCSEMs, FCSEMs and combined plastic and FCSEMs were 17.1%, 37.5% and 33.3% respectively. 12 out of 17 patients had benign stricture remodelled, with mean time from index ERCP to remodelling being 50.5 months (range 21.1–137.8 months). Benign stricture...