

DiLumen™ - Assisted Colonic Underwater Endoscopic Mucosal Resection

Clinical Case Report

Patient History:

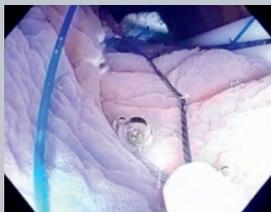
Following a routine surveillance colonoscopy, a 78-year-old female was scheduled for endoscopic mucosal resection (EMR) at Gregorio Marañón Hospital for a 2cm lesion located in the transverse colon. Past medical history included Adenocarcinoma colon S/P right hemicolectomy, hypertension, Type II Diabetes and Chronic Ischemic Heart Disease.

Procedure:

The DiLumen™ EIP (Endolumenal Interventional Platform) assisted polypectomy was performed under conscious sedation in the Endoscopy Suite. The patient was positioned in left lateral position. DiLumen was loaded over an I-length colonoscope (130 cm), and the device and endoscope were navigated just beyond the ileocolonic anastomosis in 7 minutes without difficulty. Upon slow withdrawal of the device and scope, the lesion was found to be located in the transverse colon, proximal to a previously placed ink tattoo. DiLumen's balloons were deployed on the either side of the lesion and inflated to create an isolated Therapeutic Zone (TZ). The Aft Balloon (AB) provided scope stability and the extended Fore Balloon (FB) provided further stability and flattened the mucosa to improve visualization. The TZ between the two DiLumen balloons was filled with water to further improve visualization via a resulting magnification effect, and to assist with tissue lifting. A hexagonal snare was used to remove two pieces (one large and one smaller peripheral piece) via underwater EMR. After a wound assessment, a soft coagulation setting (80w) was used to coagulate small arterial vessels around the edge of the resection site. Two 16mm hemoclips were used to close the mucosal defect. The DiLumen sheath was used repeatedly as a conduit to remove specimen fragments and reintroduce the colonoscope for a post-procedure examination. There were no adverse events.



TZ was created with DiLumen™



Snare visible in the TZ



Polyp removed

Results

Procedure time was 42min, from initial scope introduction to removal of the lesion. The lesion was classified as a non-granular, Laterally Spreading Tumor (LST) with a Paris classification of 0-IIb. Histological analysis characterized the lesion as a tubular adenoma with low grade epithelial dysplasia.

A1 One piece: 0.8 cm maximal diameter.
A2 Second piece: 2.1 x 0.6 x 0.4 cm

Discussion

A noticeably small amount of water irrigation was necessary during the procedure due to the DiLumen EIP used in this procedure. The device balloons aided in limiting the area of irrigation to the isolated section of the bowel lumen situated proximal and distal to the lesion. The balloons also provided improved scope stability during the procedure as well as excellent lesion visualization. An estimated procedural time saving of around 40min was achieved compared to typical non – DiLumen Underwater EMR procedures.



DR. RODRIGO BOROBIA, MD, PHD

Gastroenterologist
Gastroenterology and Hepatology Department,
Hospital General Universitario Gregorio Marañón
Madrid, Spain



253 Post Road West, Westport, CT 06880
Tel: (203) 463-2669 Fax: (203) 557-0459
Lumendi.com