

## A Double Balloon Endoscopic Platform Assisted Complex Sigmoid Polyp Resection

### Clinical Case Report

#### Patient History:

A 55-year-old male Patient with a history of hypertension underwent colonoscopy after a positive FOBT (Fecal Occult Blood Test). A giant sessile polyp with a large base was found at the distal sigmoid colon. Patient was subsequently referred to Santa Chiara Hospital in Trento, Italy for removal of this 80x55mm lesion (Figure 1). Morphology was characterized as JNET 2a with a suspected area possibly as a 2b. The polyp was situated at a complex location behind a fold. A decision was made to attempt an endoscopic approach for an en bloc resection by endoscopic submucosal dissection (ESD) utilizing a double balloon endoscopic platform device to aid in visualization, scope stabilization, and access to the challenging proximal side of the lesion.

#### Procedure:

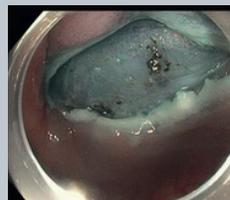
The Endoluminal Interventional Platform (EIP, DiLumen™, Lumendi, Ltd.) is a double balloon oversheath device that fits over any standard colonoscope. The front balloon (FB) can be extended or retracted during the procedure to help provide a therapeutic zone for the intervention and assist with insufflation, visualization, and stability while using endoscopic tools. ESD was performed under conscious sedation (Madapolam 2.5 mg and Meperidine 60 mg) in the Endoscopy suite in a left lateral position. The 103cm EIP device was loaded over a 130cm colonoscope and navigated to the lesion in 4 min without difficulty. The FB was extended beyond (proximal) to the lesion with the aft balloon (AB) distal to the lesion to create a stable working zone when both balloons were inflated (Figure 2). Extension of the FB helped stabilize the area while flattening the mucosa and shortening the sigmoid angulation – better exposing the proximal side of the lesion. As a result, the device provided improved scope stability, enhanced visualization, and decreased sigmoid tortuosity due to flattening of the haustral folds making ESD more feasible. A lifting agent (EverLift™, Laborie Corp.) was utilized to begin the intervention and electrosurgery (Hybrid Knife®, Erbe) ensued with a circumferential mucosal cut (Figure 3) with good margins achieved injecting NaCl and Methylene Blue as needed. The EIP helped access the proximal side of lesion helping to complete the proximal mucosal cut more easily. Standard ESD Cap dissection was started on the proximal margin and an en-bloc resection of 80x55mm lesion (Figure 4) was completed in a total case time of 110 minutes. No mucosal defects were found so closure with clips or suture was not deemed necessary. There were no complications, notable patient discomfort, or adverse events. The patient was discharged 2 hours after the procedure. Pathology confirmed the classification as Intramuscular Adenocarcinoma with early muscularis mucosa involvement. Vertical and lateral margins were negative. There was no budding or intravascular invasion.



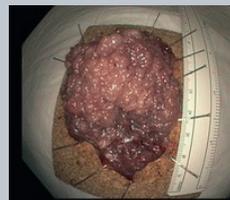
**Figure 1**  
Pre-intervention view of lesion



**Figure 2**  
Front balloon extended beyond scope tip



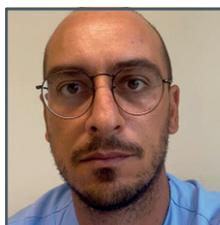
**Figure 3**  
Dissection begins



**Figure 4**  
Final specimen pinned for pathology

#### Conclusion

The EIP double balloon device facilitated superior lesion access and stability allowing for easier en-bloc dissection of a giant sessile polyp in an outpatient setting, avoiding surgical intervention. Significant time saving was achieved.



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**DiLumen**  
Endolumenal Interventional Platform