

# LiftUp®

The durable solution.



## Try this with other injection solutions!

LiftUp® creates a submucosal gel cushion at body temperature due to its thermoreversible properties. It is a new injection solution for safe and easy<sup>1</sup> endoscopic resection, such as polypectomy, EMR and ESD. The pronounced safety cushion lasts even after mucosa incision.<sup>2</sup>

Tissue layers and structures are well separated and exposed, thereby facilitating the resection procedure. The long-lasting lifting makes re-injection less necessary and saves time.<sup>3</sup> Each vial contains 20 ml of LiftUp® pre-mixed with methylene blue and is ready-to-use.



<sup>1</sup> Wedi, E., Ho, C.-N., Conrad, G., Weiland, T., Freidinger, S., Wehrmann, M., Meining, A., Ellenrieder, V., Gottwald, T., Schurr, MO., Hochberger, J. (2019). **Preclinical evaluation of a novel thermally sensitive co-polymer (LiftUp) for endoscopic resection.** *Minim Invasive Ther Allied Technol*, 28(5), 277–284. doi: 10.1080/13645706.2018.1535440

<sup>2</sup> Wedi, E., Koehler, P., Hochberger, J., Maiss, J., Milenovic, S., Gromski, M., Ho, C.-N., Gabor, C., Baulain, U., Ellenrieder, V., Jung, C. (2019). **Endoscopic submucosal dissection with a novel high viscosity injection solution (LiftUp) in an ex vivo model: a prospective randomized study.** *Endosc Int Open*, 07(05). doi: 10.1055/a-0874-1844

<sup>3</sup> Meier, B., Wannhoff, A., Klinger, C., & Caca, K. (2019). **Novel technique for endoscopic en bloc resection (EMR+) – Evaluation in a porcine model.** *World J Gastroenterol*, 25(28), 3764–3774. doi: 10.3748/wjg.v25.i28.3764



# Empower your scope

AWC® – Additional Working Channel

## EMR+ shifts the cut-off for en-bloc resection

**The AWC® (Additional Working Channel) provides a second channel for your standard gastroscope or colonoscope.**

Through bimanual working with triangulation, an efficient resection can be performed by making use of traction and countertraction.<sup>1</sup> A large distance between the endoscope channel and the additional working channel increases the working space for the instruments.

**A comparative trial showed that EMR+ is superior to conventional EMR for lesions > 2 cm.<sup>2</sup>**

By using a snare and a grasping instrument simultaneously EMR+ facilitates en-bloc resection of larger lesions compared to conventional EMR. For 3 cm lesions, EMR+ reaches its best discriminatory power against the standard procedure concerning en-bloc resection (86.36 % vs. 18.18 %). EMR+ could help to close a therapeutic gap with manageable complexity, time and costs.

<sup>1</sup> Walter B, Schmidbaur S, Krieger Y, Meining A (2019) Improved endoscopic resection of large flat lesions and early cancers using an external additional working channel (AWC): a case series. *Endoscopy International Open*; 7(2): E298-E301

<sup>2</sup> Knoop RF, Wedi E, Petzold G, Bremer SCB, Amanzada A, Ellenrieder V, Neesse A, Kunsch S (2020) Endoscopic mucosal resection with an additional working channel (EMR+) in a porcine ex vivo model: a novel technique to improve en-bloc resection rate of snare polypectomy. *Endoscopy International Open*; 8(2): E99-E104



RESECT+  
AWC®





o v e s c o  
innovation in scope



# RESECT+ .....

Optimised endoscopic resection techniques



RESECT+ is an instrument line consisting of optimised instruments for ESD+, EMR+ and other endoscopic resection techniques. They are also suitable for haemostasis and POEM, and facilitate clip removal. An appropriate product is thus available for every phase of endoscopic resection.

## ..... RESECT+

### Optimised endoscopic resection techniques

RESECT+ provides products for every phase of ESD+ and EMR+.

#### Multi-modality

- Combination of classic dissection using HF knives with the option of blunt dissection using the Coag Dissector

#### Efficiency

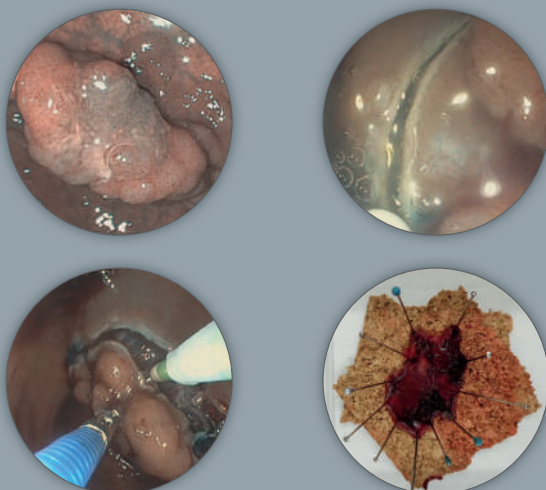
- Reduced procedure time due to fewer instrument changes
- Easy and fast performance of EMR and ESD
- Efficient resection of large en-bloc specimens

#### Safety

- Flushing of the target tissue for better overview and fast identification of bleeding
- Submucosal re-injection without instrument exchange
- Stable and high injection cushion for safe performance of the endoscopic resection
- Blunt spreading and preparation with the Coag Dissector facilitates keeping the dissection plane

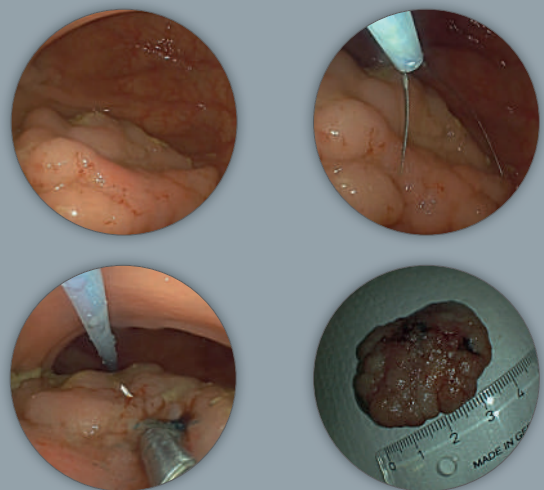
## ..... Application

### ESD+ in the rectum



ESD+ of a rectal polyp with grasper and AqaNife using the Additional Working Channel (AWC)<sup>1</sup>

### EMR+ in the colon



EMR+ in the colon with OTSC<sup>®</sup> Anchor and snare using the Additional Working Channel (AWC)<sup>1</sup>



The AWC® (Additional Working Channel) is an endoscopic system that provides an additional working channel for flexible endoscopes.

**The AWC® is suitable for various procedures:**

- EMR with snare and FTRD® Grasper or OTSC® Anchor (EMR+)
- ESD with grasper and knife (ESD+)
- Clip removal with additional grasper

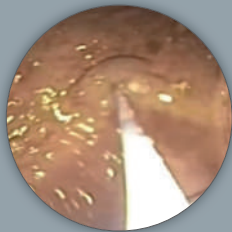
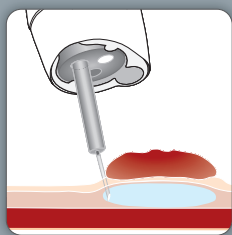
**AWC® features:**

- Easy transformation of a single-channel endoscope into a double-channel functionality
- Distance between the working channels individually adjustable and greater than with a double-channel endoscope
- Bimanual working with triangulation
- Enables effective resection
- Additional lumen for suction or flushing
- For gastroscopes and colonoscopes

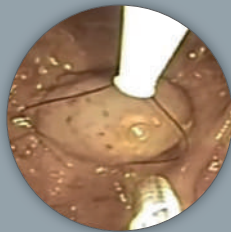
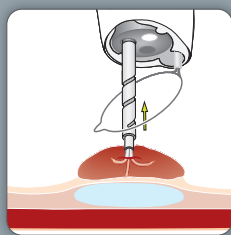


## ..... Application

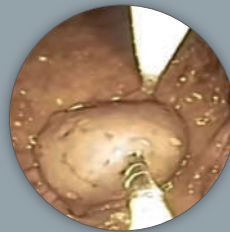
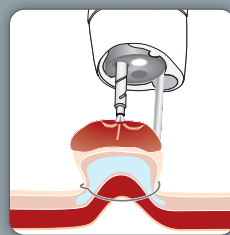
### EMR+



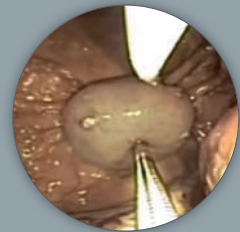
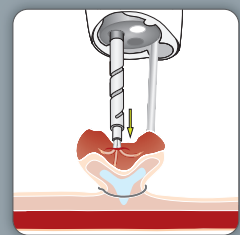
Injection of LiftUp®



Positioning of snare and OTSC® Anchor or FTRD® Grasper



Elevation of the lesion and snare closure



Push-back<sup>2</sup> of OTSC® Anchor or FTRD® Grasper while snare stays closed and subsequent resection<sup>3</sup>

2 Note: Anchor needles must not be captured with the snare during the push-back move. If in doubt, the Anchor can be closed to avoid a short circuit.

3 Dr. B. Meier, Hospital Ludwigsburg, Germany [in-vivo model]

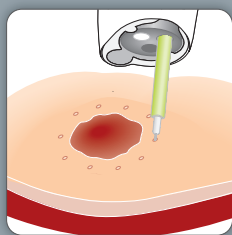
The AqaNife is a monopolar electrosurgical instrument for endoscopic submucosal dissection using flexible endoscopes. It is a fixed dissection knife.

**AqaNife features:**

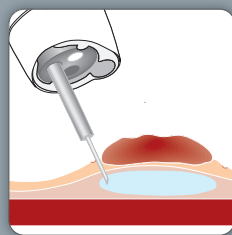
- Straight needle for flexible dissection angle
- Precise marking of tissue
- No retraction of the needle in case of tissue contact
- Defined, fixed position of the needle
- Ceramic sheath tip as stopper and protector
- Re-injection without instrument change, flushing function
- Integrated irrigation channel for connection to conventional irrigation pumps for flushing the tissue



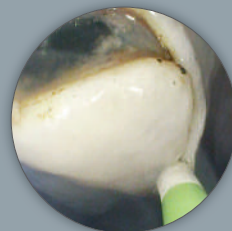
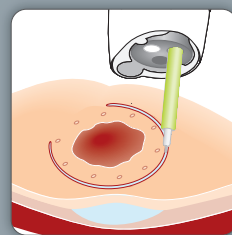
**ESD+**



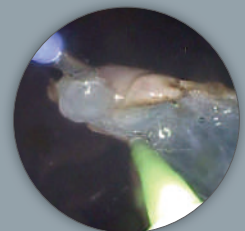
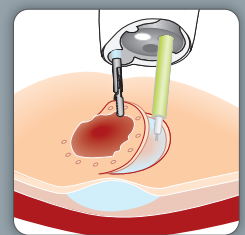
Marking



Injection of LiftUp®



Incision of 4/5 of the total circumference



Endoscopic submucosal dissection<sup>4</sup> with AqaNife and additional grasper in the AWC®

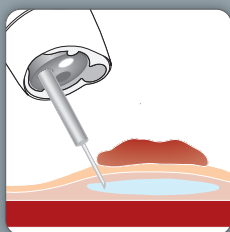
The new injection agent LiftUp® for injection in the submucosa for safe and easy endoscopic resection.

**LiftUp® features:**

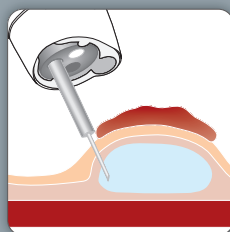
- Gels thermo-reversibly in tissue at body temperature
- Creates a permanent cushion in the submucosa even after mucosa incision
- Separates and exposes layers and structures
- Saves time due to fewer re-injections
- Enables easy, fast and safe resection



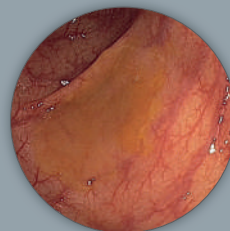
LiftUp®



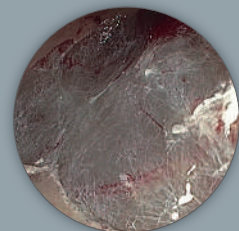
Injection of a small amount of saline solution



Injection of LiftUp® at the same spot until the desired lifting is achieved



Resection site before



Resection site after<sup>5</sup>

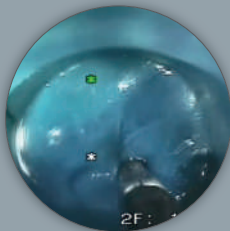
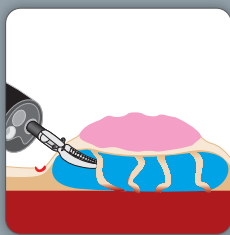
The Coag Dissector combines safe and easy blunt dissection with precise coagulation of bleeding.

**Coag Dissector features:**

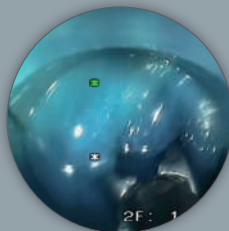
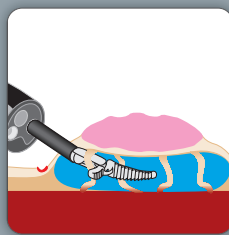
- Rotatable, flexible instrument shaft for precise alignment and positioning of the grasper tip
- Curved grasper for optimal targeting of the tissue
- Blunt tissue preparation, as in surgery
- Effective HF coagulation, as with pincers
- Small geometry for easy manoeuvrability
- Wide range of applications: ESD, haemostasis, POEM



**ESD**

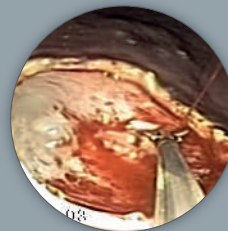
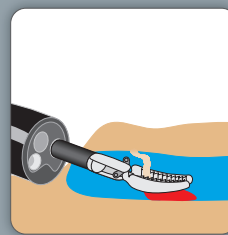


Injection to lift the lesion

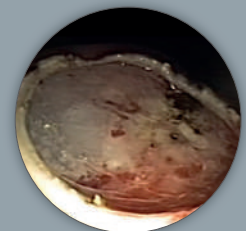
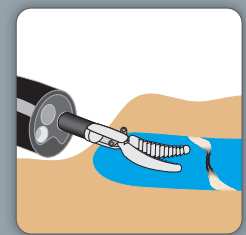


Blunt dissection by spreading the Coag Dissector

**Haemostasis**



Grasping of bleeding tissue with the Coag Dissector



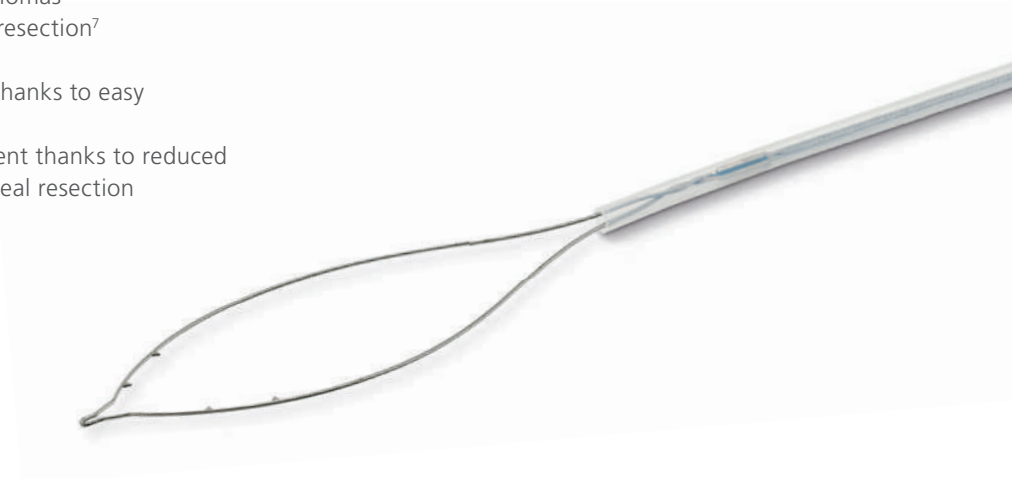
Effective haemostasis<sup>6</sup>



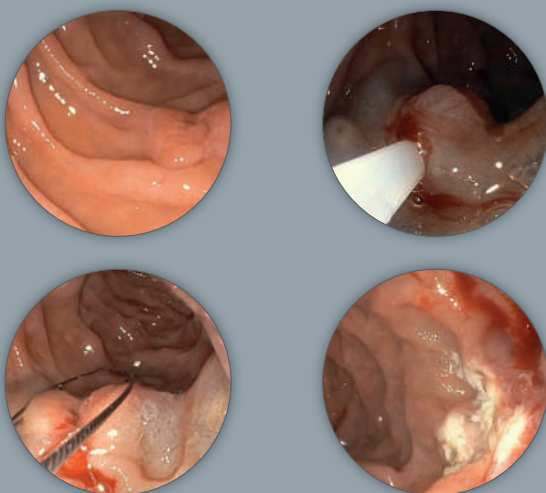
The Traction Polypectomy Snare (TPS) is a specially designed, serrated snare for grasping and removing polyps in the gastrointestinal tract via a flexible endoscope.

**Traction Polypectomy Snare features:**

- Solid grip even on broad-based adenomas
- Up to 30% more tissue capture per resection<sup>7</sup>
- Facilitates resection of flat lesions
- Re-positioning possible at any time thanks to easy opening properties
- Improved histopathological assessment thanks to reduced number of specimens during piecemeal resection

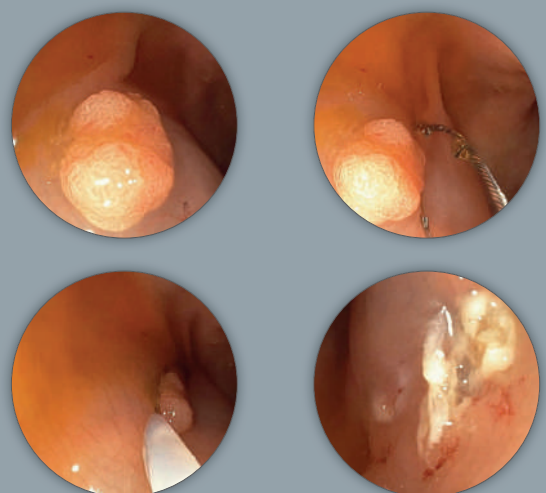


**Duodenal polypectomy**



Duodenal polypectomy using the Traction Polypectomy Snare<sup>8</sup>

**Cold snare polypectomy**



Cold snare polypectomy using the Traction Polypectomy Snare<sup>8</sup>

7 Proßt RL, Baur FE. A new serrated snare for improved tissue capture during endoscopic snare resection. Minim Invasive Ther Allied Technol. 2010; 19:2; 100-4  
 8 Shou Jiang Tang, M.D., University of Mississippi Medical Center, Jackson, Mississippi

## Details and components

Instrument line consisting of optimised instruments for ESD, EMR and other endoscopic resection techniques.



Additional working channel for flexible endoscopes, available for gastroscopes and colonoscopes.

- For instruments with a diameter of up to 2.8 mm
  - For endoscope diameters from 8.5–13.5 mm
- Ref. no. 200.57.01 (length 122 cm), ref. no. 200.57.04 (length 185 cm)



Thermo-reversible injection solution for endoscopic resection.

- Safe and easy resection due to durable and stable cushion
  - Time saving thanks to fewer re-injections
- Ref. no. 200.56.01, ref. no. 200.56.02 (kit with injection accessories)



Monopolar HF instrument for blunt dissection and coagulation.

- Curved grasper design with rotatable instrument shaft for precise targeting
  - Length: 165 cm; compatible with working channel diameters of 2.8 mm or larger
- Ref. no. 200.50



Monopolar HF instrument for incision and dissection.

- Dissection needle length available for thin and thick tissue: 1.5 mm | 2.0 mm | 2.5 mm | 3.0 mm
  - Length: 220 cm; compatible with working channel diameters of 2.8 mm or larger
- Ref. no. 200.53.01–200.53.04



Serrated polyfile snare for endoscopic tissue resection.

- Snare diameter: 25 mm; wire diameter: 0.38 mm
  - Length: 220 cm; compatible with working channel diameters of 2.8 mm or larger
- Ref. no. 200.55.10



OTSC® Anchor in two variations with different needle length.

Ref. no. 200.10 (length: 165 cm, depth: 4 mm), ref. no. 200.11 (length: 220 cm, depth: 2–2.5 mm)



Grasping forceps for grasping tissue for working channel diameters of 2.8 mm or larger

Ref. no. 200.73 (length: 220 cm)

### Ovesco Endoscopy AG

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Germany

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O V E S C O

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**RESECT+** for optimized endoscopic resection

## CASE STUDY

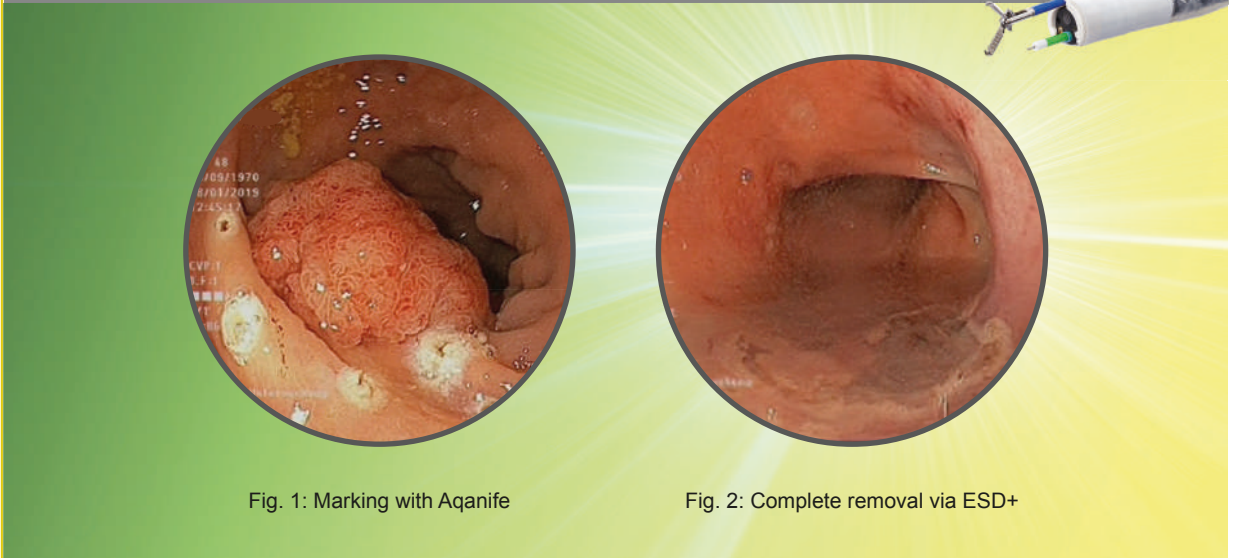


Fig. 1: Marking with Aqanife

Fig. 2: Complete removal via ESD+

### PD Dr. Matthias Breidert

Hospital Waid, Zurich, Switzerland  
Head of Gastroenterology/Hepatology

## First experience with ESD+ on a 3 cm rectal polyp

*Breidert M, Tajasev V, Locher R, Zellweger M*

### PROBLEM

A 48-year-old female patient was introduced with an approx. 3 cm large rectal polyp for resection under clinical conditions. A broad based, raised, villous polyp of approx. 3 cm in size (pit pattern III/L) was found at 8 cm from ano.

### METHOD

Due to the localization and the pit pattern structure, we chose a resection procedure using ESD+ (grasper via double channel provided by AWC®). The AWC® (Additional Working Channel, Ovesco) is an endoscopic system that provides an additional working channel for flexible endoscopes. The lesion was injected with HAES/toluidine blue (20 ml), followed by circumcision and resection with the Aqanife, 2 mm (Ovesco) in double channel technique (grasping forceps, Olympus). An oozing bleeding was stopped with adrenaline (1:20000), several small lb-bleedings with Coagrasper™ (Olympus). In total, the specimen was removed in toto and stretched on cork (size 35 mm after Buscopan administration). The inspection of the resection site immediately after the procedure (70 min, 1000 mg propofol intravenously) showed a complete resection. The safety margins were macroscopically tight, but the overall result was excellent. There were clean local conditions at the end of the examination.

### RESULTS

Histological diagnosis: A mucosectomy specimen of 2.5 x 2.2 x 0.4 cm, not thread-marked, stretched on cork. Tubulo-villous adenoma of the large intestine mucosa with predominantly low-grade and focal high-grade dysplasia. Focal low-grade dysplasia reaching into the lateral artificially altered specimen edges. No invasive growth. Complete removal.

The procedure was carried out on an outpatient basis, the patient was discharged 3 hours after the end of the procedure without any post-procedural pain or discomfort. An inspection of the resection site is planned again in 6 months.

**RESECT+** for optimized endoscopic resection

**CASE STUDY**

CONCLUSION FOR PRACTICAL APPLICATION

The dissection of polypoid lesions using ESD+ with the help of a grasper and the AqaNife, as well as Coagrasper is safely feasible. The implementation of the ESD+ technique can, according to initial assessment, be significantly accelerated by more practice. The additional working channel facilitates hemostasis (additional lumen for suction and flushing). The AqaNife is a monopolar electrosurgical instrument for endoscopic submucosal dissection using a flexible endoscope with a working channel with a minimum diameter of 2.8 mm. It is a fixed (short) dissection knife, which offers advantages such as precise marking of the tissue, defined, fixed position of the needle, no pushing back in case of tissue contact, straight needle for variable dissection angles, ceramic cap as stopper and protector, re-injection without instrument change as well as flushing possibility.

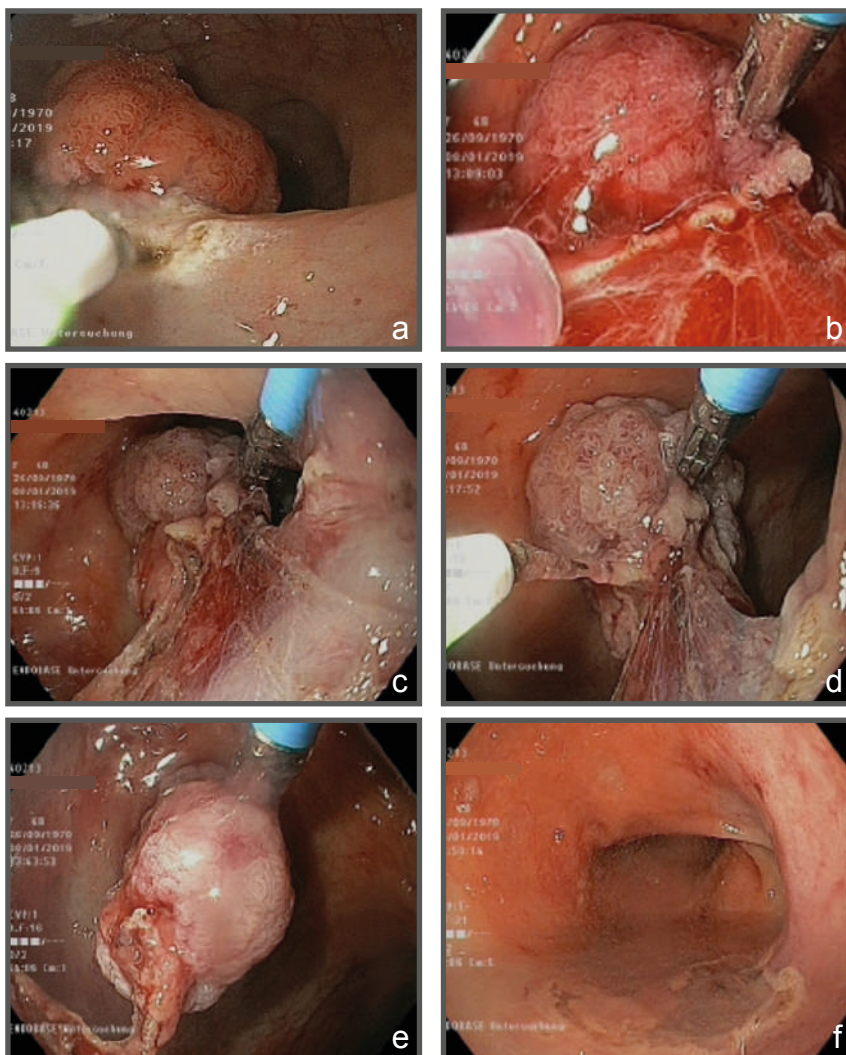


Fig. 3: ESD+  
 a) Circumcision with AqaNife  
 b-e) Bimanual working with grasper and AqaNife  
 f) Complete resection