

Endoscopic Mucosal Resection Devices

Effective, Efficient, and Less Invasive, Olympus Endoscopic Mucosal Resection Devices are the State-of-the-Art Treatment Solution

EMR — or Endoscopic Mucosal Resection — is fast proving to be one of the most promising techniques for the treatment of gastrointestinal lesions. A procedure that is both remarkably precise and minimally invasive, the possibilities of EMR have generated enormous excitement in the medical community. Now Olympus is making it easier for physicians to utilize this state-of-the-art treatment. Our lineup of Endoscopic Mucosal Resection Devices dramatically increase the versatility and efficiency of EMR while making the procedure easier to perform.



EMRC

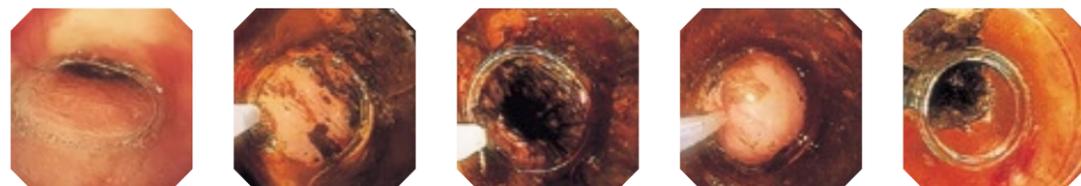
Endoscopic Mucosal Resection with transparent plastic Cap-fitted panendoscope

Golden Standard of EMR, using large-capacity distal attachment and diagnostic scopes

Using a cap-mounted panendoscope, you can easily suction the area around a lesion, making it easier to effectively resect the target mucosa, regardless of its location, direction, or dimensions. Even flat lesions can be accurately targeted.

1. After spraying dye on the area where lesions are suspected, fit the distal attachment to the scope tip and secure it with medical elastic tape. If you're using a wide oblique distal attachment with a rim, align the notch with the scope channel.
2. Advance the scope tip until it reaches the target area. Elevate the lesion by injecting sufficient saline into the target area.
3. Insert a snare through the endoscope's instrument channel. While pressing the distal attachment against healthy tissue,

- use the suction function of the scope a little in order to pre loop the snare along the circumferential rim of the distal attachment.
4. Suction the lesion into the distal attachment. Snare and ligate the suctioned mucosa.
5. Stop suctioning and observe the target site through the endoscope. Then activate the electro-surgical snare and resect the lesion.
6. Withdraw the snare. Draw the resected tissue into the distal attachment using the endoscope's suction. Withdrawal of the endoscope and retrieval of resected tissue can be done simultaneously.
7. Spray dye on the resected area to confirm that no lesions remain.



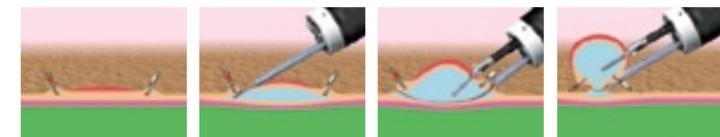
Four-Point Fixation EMR Procedure with a Dual-Channel Endoscope

Securing the target site using two short clips

Using Jumbo grasping forceps and two short clips of different colors, four points are fixed around the lesion. The lesion can then be grasped firmly and resected. With the clips still in place, the specimen can be withdrawn with the forceps.

1. Fix short clips of different colors around the lesion, one on the oral side and the other on the anal side.

2. Inject saline submucosally until the entire lesion (and the clips) is elevated. Place snare around elevated lesion.
3. Grasp the lesion on both sides where the short clips are placed with the Jumbo grasping forceps.
4. Snare the lesion from the outside of the clips and forceps, and then activate the electro-surgical unit to resect the lesion.
5. Remove the lesion with the short clips still holding it.

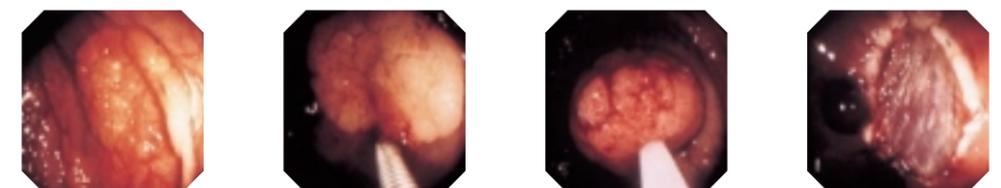
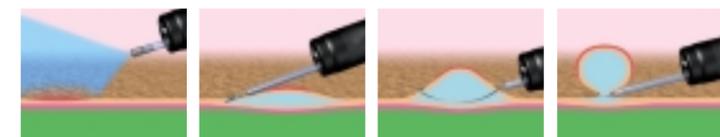


Single-Channel EMR Procedure

Simple and Effective EMR technique offers optimal Mucosal Resection in the Lower GI

Ideal for the lower digestive tract, this technique artificially elevates the lesion with a local injection of saline. The elevated lesion is then strangulated and resected with an electro-surgical snare. With the introduction of an anti-slip snare, this technique can be done easily with a single-channel scope.

1. Spray dye on the area where a lesion is suspected to confirm the size and location of the lesion.
2. Inject saline into the submucosa of the lesion so that an elevation is formed with the lesion at its highest point.
3. Put the snare around the elevation.
4. Strangulate the elevation until resistance is felt, and then activate the electro-surgical unit to resect the lesion.





EMRC Devices

Ideal for Applications in the Upper Digestive Tract

Our commitment to EMRC is reflected in the comprehensive selection of accessories we have developed to help you utilize this advanced technique. From individual accessories to a complete EMRC kit for upper digestive tract procedures, Olympus offers all the tools you need to succeed in Endoscopic Mucosal Resection.

Injection Needles

NM-200L-0423
NM-201L-0423

A sheath made of Teflon makes these injection needles both flexible and resistant to warping. As a result, more accurate piercing is possible.



Electrosurgical Snare

SD-221L-25 SnareMaster™ (Disposable)
SD-7P-1 (Reusable)

Specifically designed for EMRC, our snares feature a crescent-type design exclusive to Olympus. More minute adjustment of the loop opening than with conventional oval snares is also possible. The snare is made of a pliable, thin wire that facilitates pre-looping on the rim of a distal attachment.



■ Dye Spray Tube Specifications

Model	Channel diameter	Working length
PW-5L-1/205L	2.8mm	1,650mm
PW-5V-1/205V	2.8mm	2,400mm

■ Injection Needles Specifications

Model	Channel diameter	Insertion portion length	Needle length	Gauge
NM-200L-0423	2.8mm	1,650mm	4mm	23G
NM-201L-0423	2.0mm	1,650mm	4mm	23G
NM-200U-0425	2.8mm	2,300mm	4mm	25G

A set: 6 pieces/box B set: 1 piece/box

■ Electrosurgical Snare Specifications

Model	Channel diameter	Type	Maximum loop diameter	Wire diameter	Remarks
SD-7P-1	2.0mm	Crescent	23mm	0.30mm	A Set: Wire x 2, Sheath x 2, Handle x 1, A cord x 1 B Set: Wire x 2, Sheath x 2
SD-5L/U-1	2.8mm	Crescent	22mm	0.40mm	A Set: Wire x 2, Sheath x 2, Handle x 1, A cord x 1, Wire Leader x 2 B Set: Wire x 2, Sheath x 2
SD-6L/U-1	2.8mm	Hexagonal	22mm	0.40mm	A Set: Wire x 2, Sheath x 2, Handle x 1, A cord x 1, Wire Leader x 2 B Set: Wire x 2, Sheath x 2
SD-16L/U-1	2.8mm	Oval with spikes	25mm	0.43mm	A Set: Wire x 2, Sheath x 2, Handle x 1, A cord x 1 B Set: Wire x 2, Sheath x 2
SD-17L/U-1	2.8mm	Oval with spikes	15mm	0.43mm	A Set: Wire x 2, Sheath x 2, Handle x 1, A cord x 1 B Set: Wire x 2, Sheath x 2
SD-221L/U-25	2.0mm	Crescent	25mm	0.30mm	Disposable, 10pcs/box Integrated handle
SD-230U-20	2.8mm	Oval, Ridged wire	20mm	0.48mm	Disposable, 10pcs/box Integrated handle

Dye Spray Tube

PW-5L-1/205L*

This spray tube can be used with a variety of dyes. A sprinkler mechanism lets you distribute dye over a wider area.



*PW-205L is only available as a component of EMR Kit, K-001-009.

Distal Attachments*

MH-593-598/
MAJ-289-297 (Hard Type)
D-206-01-06 (Soft Type)

Ensuring a clear view free from fogging at all times, these distal attachments are designed to maintain a constant distance between

the scope tip and the mucous membrane. This ensures that observation is always from an appropriate distance even in cases where the scope tip could easily get too close to the membrane — such as in the esophagus. These attachments also facilitate EMRC by suctioning the mucous membrane inside the distal attachment.



* Available as a kit component in the United States.

EMR Kit

K-001-009

With all the accessories required for EMRC procedures in the upper digestive tract included in a single package, this kit eliminates the need to prepare accessories before performing EMRC procedures. And since all the accessories are sterile, single-use disposable items, just open up the package and you're ready to go. There are 9 types to choose from, depending on the shapes and the softness of the distal attachment to be included.

Note: These accessories are specifically designed for EMRC in the upper digestive tract.



Four-Point Fixation Method EMR Devices

Securing the Target Site with Two Short Clips

Using Jumbo grasping forceps and two short clips of different colors, four points are fixed around the lesion. The lesion can then be grasped firmly and resected. Olympus offers a complete set of accessories specifically designed for this new procedure.

Injection Needle

NM-200L-0423

With their Teflon sheaths, these injection needles are both flexible and warp resistant, ensuring accurate piercing.



Electrosurgical Snare

SD-5L-1

Olympus's original crescent-type snares allow you to adjust the loop opening more precisely than with a conventional oval snares. The thin, pliable wire also facilitates pre-looping on the rim of a distal attachment.



Dye Spray Tube

PW-5L-1

Suitable for use with a variety of dyes, this spray tube features a sprinkler mechanism to distribute dye over a wide area.



Clipping Devices

HX-5LR/5QR/6UR-1
MAJ-458
(Colored Short Marking Clips)

These color-coated clips effectively mark and identify the target site. They are also useful for identifying the direction of the lesion after resection.



Grasping Forceps

FG-42L/47L-50L-1

Jumbo grasping forceps have wider jaws than conventional grasping forceps so you can grasp a larger area at one time.



Note: The four-point fixation method can be applied in other regions. For use in the lower digestive tract, use "U" length accessories. (Please note, however, that the dye spray tube is only available in the "V" length.)

■ Distal Attachment Specifications

Model	Maximum diameter	Model	Maximum diameter	Model	Maximum diameter	Compatible endoscopes
Straight with rim			Oblique with rim			Wide opening with rim
MH-593	12.9mm	MAJ-289	12.8mm	MAJ-295	16.1mm	GIF-PO20, P140, 160, V70, XQ200, XQ230, XQ240, SP240
MH-594	13.9mm	MAJ-290	13.8mm	MAJ-296	16.1mm	GIF-XQ20, XQ30, XQ40, 100, 130, 140, XQ140, Q160, Q240, Q240X, V PCF-P240A
MH-595	14.9mm	MAJ-291	14.8mm	MAJ-297	16.1mm	GIF-Q20, Q30, Q40, 1T20, 1T30, Q140, 1T130, 1T140, Q200, Q230, 1T240 PCF-20, 100, 130, 140, 160A, 200, 230, 240
MH-596	17.2mm	MAJ-292	17.2mm	—	—	GIF-2T20, 1T100, CF-P20, V
MH-597	19.2mm	MAJ-293	19.1mm	—	—	GIF-2T100, 2T200 CF-30, 40, 100T, 1T140, 130, 140, Q140, Q160, Q160A, V70, 230, Q240
MH-598	15.8mm	MAJ-294	15.8mm	—	—	CF-20, 1T20, 100, 1T100, 200, 1T200, 2T200, 200Z



Single-Channel Method EMR Devices

Simplifying Mucosal Resection in the Lower Digestive Tract

Single-channel EMR is the most commonly used EMR technique in the lower digestive tract and now it's easier to perform than ever. Olympus offers a wide assortment of single-channel EMR accessories, available either as separate components or pre-packaged as a complete, ready-to-use kit.

Electrosurgical Snare

SD-230U-20

The spiral snare wire captures a larger area of mucosa without having to hold the lesion with grasping forceps, as the pushing force goes straight down the snare wire. The wire's twisted design enables it to perform as if there were small barbs along the snare loop. This design, combined with the strong pushing force minimizes slipping when capturing the mucosal lesions.



SD-6U-1

The Olympus hexagonal type snare has a wide opening feature which enables the capture of larger lesions and facilitates the single-channel EMR method. In addition, the physician can smoothly strangulate the mucosa without getting tissue caught at the folds of the wire.



Dye Spray Tube

PW-5V-1/205V*

The spray catheter distributes the dye in a controlled manner, enabling coverage of a wider area than with a syringe connected to the scope's forceps port.



*PW-205V is only available as a component of EMR Kit, K-010.

Injection Needle

NM-200U-0425

A large sheath diameter enables secure piercing, while the 25G needle diameter minimizes the size of the mucosal puncture to keep saline leakage to a minimum during EMR procedures.



Grasping Forceps

FG-45U/46U-1

Tripod/Pentapod prongs can collect small tissue samples with minimal tissue damage. Proximal flushing port permits irrigation through internal lumens.



EMR Kit

K-010

All the Endo-Therapy accessories necessary for EMR in the lower digestive tract are included in a single package, eliminating the need to prepare accessories for each procedure. Since all the accessories are sterile, single-use disposable items, just open the kit and you're ready to go.



Note: Use "L" length accessories for single-channel method EMR in the upper digestive tract. Keep in mind that the electrosurgical snare "SD-230U-20" is only available in the "U" length.

■ Grasping Forceps for Retrieval Specifications

Model	Shape	Opening width	Compatible channel dia.
FG-45L-1	Tripod	20.0mm	2.8mm
FG-45U-1	Tripod	20.0mm	2.8mm
FG-46L-1	Pentapod	20.0mm	2.8mm
FG-46U-1	Pentapod	20.0mm	2.8mm

■ Grasping Forceps Specifications

Model	Shape	Opening width	Compatible channel dia.
FG-42L-1	Rat tooth & alligator jaw	11.3mm	2.8mm
FG-47L-1	Rat tooth & alligator jaw	14.9mm	2.8mm
FG-48L-1	Rat tooth	19.4mm	2.8mm
FG-49L-1	Rat tooth & alligator jaw	19.4mm	2.8mm
FG-50L-1	Rat tooth	15.5mm	2.8mm

■ Rotatable Clip Fixing Devices Specifications

Model	Reusable		Disposable	
	HX-5LR-1	HX-5QR-1	HX-6UR-1	HX-200L-135 HX-200U-135
Compatible channel diameter	2.8mm	2.8mm	3.2mm	2.8mm
Working length	1650mm	1950mm	2300mm	1650mm
Maximum insertion portion diameter	ø2.65mm	ø2.65mm	ø2.65mm	ø2.6mm
Set	A set: Mainbody x 1 HX-600-090 x 1 HX-600-135 x 1		B set: Mainbody x 1	
Clips	HX-600-090/135/090L/090S/135S, MAJ-458		—	

Clip Fixing Devices

Direct Clipping of Hemorrhaging Sites Ensures More Reliable Hemostasis

The HX-5LR/5QR/6UR-1 reusable clips feature long, narrow tissue grasping sections that can clip blood vessels more securely, making them ideal for hemostasis of unexpected bleeding after EMR. Six different types of clips are available to suit different requirements. The disposable QuickClip fixing device is preloaded, so personnel unfamiliar with clipping procedures can use the device quickly and confidently.



QuickClip

EUS Probe

Ultrasonography Can be Performed so Easily it's Like Biopsy

Using almost the same procedure as a routine examination, ultrasonography is as easy to do as a biopsy. All you have to do is pass the ultrasonic probe through the scope's instrument channel. These probes use a mechanical radial scanning system which are excellent for orientation inside the lumen.



■ EUS Probes

Model	Frequency	Insertion tube outer diameter	Working length	Total length
UM-2R	12MHz	2.4mm	2050mm	2140mm
UM-3R	20MHz			
UM-S30-25R	30MHz			

■ EMR Kit Specifications

Kit Model	Distal Attachment Model	SD-221L-25	PW-205L	NM-201L-0423	NM-200L-0423
K-001	D-402-13212 x 1	1	1	1	—
K-002	D-402-14212 x 1	1	1	1	—
K-003	D-405-15514 x 1	1	1	1	—
K-004	D-406-15514 x 1	1	1	1	—
K-005	D-206-01 x 1	1	1	—	1
K-006	D-206-02 x 1	1	1	—	1
K-007	D-206-03 x 1	1	1	—	1
K-008	D-206-04 x 1	1	1	—	1
K-009	D-206-05 x 1	1	1	—	1

Distal Attachment Specifications

Kit Model	Distal Attachment Model	Maximum outer diameter	Compatible Endoscopes
K-001	D-402-13212	13.9mm	GIF-XV10, PV10, XQ20, XQ30, XQ40, 100, 130, 140, XQ140, Q160, Q240, Q240X, V
K-002	D-402-14212	14.9mm	GIF-VY10, Q20, Q30, Q40, 1T20, 1T30, Q140, 1T130, 1T140, Q200, Q230, 1T240
K-003	D-405-15514	16.1mm	GIF-XV10, PV10, XQ20, XQ30, XQ40, 100, 130, 140, XQ140, Q160, Q240, Q240X, V
K-004	D-406-15514	16.1mm	GIF-VY10, Q20, Q30, Q40, 1T20, 1T30, Q140, 1T130, 1T140, Q200, Q230, 1T240
K-005	D-206-01	18.0mm	GIF-160
K-006	D-206-02	18.0mm	GIF-XQ200, XQ240
K-007	D-206-03	18.0mm	GIF-V, V70, 100, 130, XQ140, XQ30, XQ40, XQ230, Q240X
K-008	D-206-04	18.0mm	GIF-V2, G110, 140, Q160, Q240
K-009	D-206-05	18.0mm	GIF-Q140, Q200, Q230, Q30, Q40, 1T130, 1T140, 1T240

■ EMR Kit for Lower GI Specifications

Kit Model	PW-205V	NM-200U-0425	SD-230U-20
K-010	1	1	1

Dual-Channel Endoscopes

GIF-2T160 GIF-2T240

Dual-Channel Gives You Powerful and Exceptional Performance in GI Tract Treatment

Designed especially for treatment in GI tract, dual-channel endoscopes provide one large diameter channel free for powerful suction while enabling an Endo-Therapy accessory to be inserted in another channel for treatment. Dual-Channel design also gives an optimal environment for two Endo-Therapy accessories to be used simultaneously without sacrificing the high quality performance of the endoscope.



Magnification Endoscopy

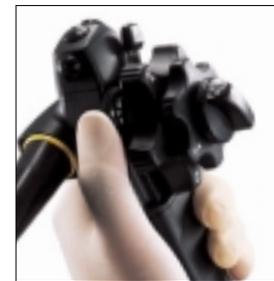
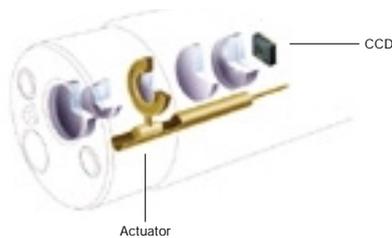
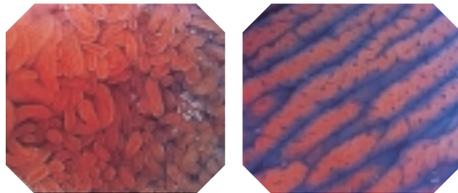
GIF-Q160Z GIF-Q240Z
CF-Q160ZI/L CF-Q240ZI/L

Zoom in for More Detailed Observation of the Mucous Membrane

Thanks to the incorporation of a high-resolution CCD and an improved optical system, the GIF/CF-Q160Z/Q240Z videoscopes are able to deliver crisp, clear images with outstanding resolution. The GIF-Q160Z/Q240Z gastrointestinal videoscope provides magnification up to 115X* in the upper digestive tract while the CF-Q160Z/Q240Z colonovideoscope can zoom images of the lower digestive tract up to 150X*.

Even at the highest resolution, you'll get none of the annoying graininess produced by electronically enhanced zooms, while uniform brightness is ensured throughout the magnification range, from wide angle to telephoto.

*When images are displayed on a 20-inch monitor.



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