# World Journal of *Clinical Cases*

World J Clin Cases 2020 July 26; 8(14): 2893-3135





Published by Baishideng Publishing Group Inc

W J C C World Journal of Clinical Cases

#### Contents

Semimonthly Volume 8 Number 14 July 26, 2020

#### **EXPERT RECOMMENDATIONS**

2893 Recommendations for perinatal and neonatal surgical management during the COVID-19 pandemic

Ma LS, Zhao YL, Wei YD, Liu C

#### **MINIREVIEWS**

2902 Clinical applicability of gastroscopy with narrow-band imaging for the diagnosis of Helicobacter pylori gastritis, precancerous gastric lesion, and neoplasia

Cho JH, Jeon SR, Jin SY

#### **ORIGINAL ARTICLE**

#### **Clinical and Translational Research**

2917 Identification of APEX2 as an oncogene in liver cancer Zheng R, Zhu HL, Hu BR, Ruan XJ, Cai HJ

#### **Retrospective Cohort Study**

2930 Restenosis after recanalization for Budd-Chiari syndrome: Management and long-term results of 60 patients

Zhang W, Tian YL, Wang QZ, Chen XW, Li QY, Han JH, Chen XD, Xu K

#### **Retrospective Study**

2942 Comparison of microendoscopic discectomy and open discectomy for single-segment lumbar disc herniation

Pang JY, Tan F, Chen WW, Li CH, Dou SP, Guo JR, Zhao LY

Clinical characteristics of patients with COVID-19 presenting with gastrointestinal symptoms as initial 2950 symptoms: Retrospective case series

Yang TY, Li YC, Wang SC, Dai QQ, Jiang XS, Zuo S, Jia L, Zheng JB, Wang HL

#### **Observational Study**

2959 Effects of policies and containment measures on control of COVID-19 epidemic in Chongqing Liang XH, Tang X, Luo YT, Zhang M, Feng ZP

- 2977 Role of shear wave elastography in the evaluation of the treatment and prognosis of supraspinatus tendinitis Zhou J, Yang DB, Wang J, Li HZ, Wang YC
- 2988 Endoscopic retrograde cholangiopancreatography in elderly patients: Difficult cannulation and adverse events

Tabak F, Wang HS, Li QP, Ge XX, Wang F, Ji GZ, Miao L



World Journal of Clinical Cases					
Conter	nts Semimonthly Volume 8 Number 14 July 26, 2020				
3000	Diagnostic value of orbicularis oculi muscle electromyography in functional epiphora				
	Lu H, Liu PD, Yao X, Wang ZF, Gao LF, Wang SP				
	MFTA-ANALYSIS				
3006	Diagnostic value of liquid-based cytology and smear cytology in pancreatic endoscopic ultrasound-guided				
	fine needle aspiration: A meta-analysis				
	Pan HH, Zhou XX, Zhao F, Chen HY, Zhang Y				
	SCIENTOMETRICS				
3021	Bibliometric analysis of randomized controlled trials of colorectal cancer over the last decade				
	Wang CY, Zhou SC, Li XW, Li BH, Zhang JJ, Ge Z, Zhang Q, Hu JH				
	CASE REPORT				
3031	Spontaneous pneumothorax in a single lung transplant recipient-a blessing in disguise: A case report				
	Deshwal H, Ghosh S, Hogan K, Akindipe O, Lane CR, Mehta AC				
3039	Endoscopic third ventriculostomy in obstructive hydrocephalus: A case report and analysis of operative technique				
	Munda M, Spazzapan P, Bosnjak R, Velnar T				
3050	Underwater endoscopic mucosal resection for neoplasms in the pyloric ring of the stomach: Four case reports				
	Kim DH, Park SY, Park CH, Kim HS, Choi SK				
3057	Successful treatment of basaloid squamous cell carcinoma in the rectosigmoid colon: A case report and review of literature				
	Lee TG, Yoon SM, Kim MJ				
3064	Synchronous sporadic bilateral multiple chromophobe renal cell carcinoma accompanied by a clear cell carcinoma and a cyst: A case report				
	Yang F, Zhao ZC, Hu AJ, Sun PF, Zhang B, Yu MC, Wang J				
3074	Intra-abdominal hemorrhage during pregnancy: Four case reports				
	Yang L, Liu N, Long Y				
3082	Pulmonary benign metastasizing leiomyoma: A case report and review of the literature				
	Dai HY, Guo SL, Shen J, Yang L				
3090	Mucoepidermoid carcinoma in the infratemporal fossa: A case report				
	Zhang HY, Yang HY				
3097	Intra-abdominal inflammatory pseudotumor-like follicular dendritic cell sarcoma associated with paraneoplastic pemphigus: A case report and review of the literature				
	Zhuang JY, Zhang FF, Li QW, Chen YF				

Camban	World Journal of Clinical Cases						
Conten	Semimonthly Volume 8 Number 14 July 26, 2020						
3108	Multiple recurrent cystic echinococcosis with abdominal aortic involvement: A case report						
	Taxifulati N, Yang XA, Zhang XF, Aini A, Abulizi A, Ma X, Abulati A, Wang F, Xu K, Aji T, Shao YM, Ahan A						
3114	Dental focal infection-induced ventricular and spinal canal empyema: A case report						
	Xue H, Wang XH, Shi L, Wei Q, Zhang YM, Yang HF						
3122	Effect of chidamide on treating hepatosplenic T-cell lymphoma: A case report						
	Wang XT, Guo W, Sun M, Han W, Du ZH, Wang XX, Du BB, Bai O						
3130	Acute esophageal obstruction caused by reverse migration of gastric bezoars: A case report						
	Zhang FH, Ding XP, Zhang JH, Miao LS, Bai LY, Ge HL, Zhou YN						



#### Contents

Semimonthly Volume 8 Number 14 July 26, 2020

#### **ABOUT COVER**

Editorial Board Member of World Journal of Clinical Cases, Dr. Iva Brčić finished medical studies at the Medical University of Graz and received her MD degree in 2003. She received her doctoral degree in 2006 at the same institution. In 2007, she enrolled in the pathology residency program at the University Hospital Center Zagreb. In 2012, she passed her board exam and, until 2015, worked as a staff pathologist at the University Hospital Center Zagreb. From 2015, she is working as the University Assistant at the Medical University of Graz. At the end of 2017, she joined the bone and soft tissue team and spent 4-mo observership at the University of Miami, FL, USA. Her ongoing research interests include bone and soft tissue neoplasms.

#### **AIMS AND SCOPE**

The primary aim of World Journal of Clinical Cases (WJCC, World J Clin Cases) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

#### **INDEXING/ABSTRACTING**

The WJCC is now indexed in Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports/Science Edition, PubMed, and PubMed Central. The 2020 Edition of Journal Citation Reports® cites the 2019 impact factor (IF) for WJCC as 1.013; IF without journal self cites: 0.991; Ranking: 120 among 165 journals in medicine, general and internal; and Quartile category: Q3.

#### **RESPONSIBLE EDITORS FOR THIS ISSUE**

Electronic Editor: Ji-Hong Liu; Production Department Director: Xiang Li; Editorial Office Director: Jin-Lei Wang.

NAME OF JOURNAL World Journal of Clinical Cases	INSTRUCTIONS TO AUTHORS https://www.wjgnet.com/bpg/gerinfo/204			
ISSN	GUIDELINES FOR ETHICS DOCUMENTS			
ISSN 2307-8960 (online)	https://www.wjgnet.com/bpg/GerInfo/287			
LAUNCH DATE	GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH			
April 16, 2013	https://www.wjgnet.com/bpg/gerinfo/240			
FREQUENCY	PUBLICATION ETHICS			
Semimonthly	https://www.wjgnet.com/bpg/GerInfo/288			
EDITORS-IN-CHIEF	PUBLICATION MISCONDUCT			
Dennis A Bloomfield, Sandro Vento, Bao-Gan Peng	https://www.wjgnet.com/bpg/gerinfo/208			
EDITORIAL BOARD MEMBERS	ARTICLE PROCESSING CHARGE			
https://www.wjgnet.com/2307-8960/editorialboard.htm	https://www.wjgnet.com/bpg/gerinfo/242			
PUBLICATION DATE	STEPS FOR SUBMITTING MANUSCRIPTS			
July 26, 2020	https://www.wjgnet.com/bpg/GerInfo/239			
COPYRIGHT	ONLINE SUBMISSION			
© 2020 Baishideng Publishing Group Inc	https://www.f6publishing.com			

© 2020 Baishideng Publishing Group Inc. All rights reserved. 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA E-mail: bpgoffice@wjgnet.com https://www.wjgnet.com



W J C C World Journal of Clinical Cases

Submit a Manuscript: https://www.f6publishing.com

World J Clin Cases 2020 July 26; 8(14): 3050-3056

DOI: 10.12998/wjcc.v8.i14.3050

ISSN 2307-8960 (online)

CASE REPORT

# Underwater endoscopic mucosal resection for neoplasms in the pyloric ring of the stomach: Four case reports

Dong Hyun Kim, Seon-Young Park, Chang Hwan Park, Hyun Soo Kim, Sung Kyu Choi

ORCID number: Dong Hyun Kim 0000-0001-5778-1264; Seon-Young Park 0000-0002-0962-5977; Chang Hwan Park 0000-0002-2995-8779; Hyun Soo Kim 0000-0003-4834-0496; Sung Kyu Choi 0000-0002-6878-3385.

Author contributions: Kim DH and Park SY conceived and designed the study, reviewed the literature, and contributed to manuscript drafting; Park CH and Kim HS contributed to manuscript drafting; Choi SK reviewed the cases and edited the manuscript; all authors issued final approval for the version to be submitted; all authors approved the manuscript for publication.

Supported by Chonnam National University Hospital Biomedical Research Institute, No. BCRI 20004.

#### Informed consent statement:

Written informed consent was obtained from the patients for the publication of this report and any accompanying images.

Conflict-of-interest statement: The authors declare that they have no conflicts of interest.

CARE Checklist (2016) statement:

The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE

Dong Hyun Kim, Seon-Young Park, Chang Hwan Park, Hyun Soo Kim, Sung Kyu Choi, Division of Gastroenterology, Department of Internal Medicine, Chonnam National University Hospital and Medical School, Gwangju 61469, South Korea

Corresponding author: Seon-Young Park, MD, PhD, Professor, Division of Gastroenterology, Department of Internal Medicine, Chonnam National University Hospital and Medical School, 42 Jaebong-ro, Donggu, Gwangju, 61469, South Korea. drpsy@naver.com

#### Abstract

#### BACKGROUND

Tumors located in the pylorus are technically more complex to resect by endoscopic resection, as the anatomical characteristics of this region can affect the adequate assessment of margins and performance of the procedure. We reported the results of underwater endoscopic mucosal resection (UEMR) of benign mucosal neoplasms located in the pyloric ring.

#### CASE SUMMARY

This case series describes 4 patients with 4 mucosal neoplasms located in the pyloric ring. The diameter of each neoplasm was less than 15 mm. We performed UEMR for the lesions. Water immersion enabled slight floating of the lesions, resulting in easy identification. We achieved en bloc resection with a snare and electrosurgical unit. All procedure were performed within 3 min without adverse events. Pathologic examination showed low-grade dysplasia with clear resection margins in one case and hyperplastic polyps in three cases.

#### **CONCLUSION**

UEMR can be an effective and safe treatment method for neoplasms in the gastric pyloric ring.

Key words: Duodenoscopy; Endoscopic mucosal resection; Neoplasm; Pylorus; Stomach; Case report

©The Author(s) 2020. Published by Baishideng Publishing Group Inc. All rights reserved.

Core tip: We present four patients who underwent underwater endoscopic mucosal resection (UEMR) for the resection of neoplasms in the pyloric ring. UEMR for neoplasms



WJCC | https://www.wjgnet.com

#### Checklist (2016).

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: htt p://creativecommons.org/licenses /by-nc/4.0/

Manuscript source: Unsolicited manuscript

Received: April 3, 2020 Peer-review started: April 3, 2020 First decision: April 22, 2020 Revised: May 1, 2020 Accepted: July 15, 2020 Article in press: July 15, 2020 Published online: July 26, 2020

P-Reviewer: Xie H S-Editor: Ma YI L-Editor: A E-Editor: Xing YX



in the pyloric ring has benefits similar to those of UEMR for colonic neoplasms: (1) Superficial lesions float into the snare as protruding lesions in underwater conditions; (2) UEMR decreases thermal damage; (3) Submucosal vessels usually remain within the resection wound, as the resection plane is superficial; and (4) The pyloric narrow lumen is constantly distended, retaining enough working space. Our case series suggested the potential of UEMR for treating neoplasms in the pyloric ring.

Citation: Kim DH, Park SY, Park CH, Kim HS, Choi SK. Underwater endoscopic mucosal resection for neoplasms in the pyloric ring of the stomach: Four case reports. World J Clin Cases 2020; 8(14): 3050-3056

URL: https://www.wjgnet.com/2307-8960/full/v8/i14/3050.htm DOI: https://dx.doi.org/10.12998/wjcc.v8.i14.3050

### INTRODUCTION

Performing endoscopic resection for tumors located in the pyloric ring is technically more difficult, as the anatomical characteristics of this region can affect the adequate assessment of margins and the working space for the procedure. Moreover, peristaltic movements of the peripyloric muscles are aggravated by submucosal injection or thermal stimuli during endoscopic procedures, preventing meticulous dissection of the lesion. These technical difficulties may be associated with incomplete resection of tumors and an increase in local recurrence and adverse events. Recently, underwater endoscopic mucosal resection (UEMR) was suggested by Binmoeller et al<sup>[1]</sup>, which has been used in the treatment of challenging lesions in the duodenum and colorectum near the appendiceal orifice and dentate line; UEMR has shown good treatment results with a high complete resection rate and low adverse event rate<sup>[2-5]</sup>. UEMR has also been adapted for recurrent or residual lesions after endoscopic resection<sup>[6,7]</sup>. Here, we reported our experience of using UEMR for benign mucosal neoplasms located in the pyloric ring. To our knowledge, it is the first report on the effectiveness of UEMR for tumors in the pyloric ring.

## CASE PRESENTATION

#### Chief complaints

Gastric neoplasms on pyloric ring.

#### History of present illness

Four patients diagnosed with gastric neoplasms on pyloric ring through screening endoscopy.

#### History of past illness

All four patients had no underlying disease that could promote bleeding or medications to promote bleeding.

#### Physical examination upon admission

All patients had no abnormal findings on physical examination.

#### Laboratory examinations

In all patients, hemoglobin level, platelet count, activated partial thromboplastin time, and prothrombin time were all within normal range.

#### Process of performing underwater endoscopic mucosal resection

We performed UEMR for 4 patients with 4 mucosal neoplasms located in the pyloric ring. For moderate sedation, balanced sedation was performed in case 1, 3 and 4. Patients received initial intravenous induction of 25 mg pethidine and 0.05 mg/kg midazolam. After 2 min, intravenous propofol (10-20 mg increments) was given repetitively, to achieve an adequate sedation level. In case 2, the endoscopic procedure was consciously performed with an initial intravenous bolus administration of 25 mg



pethidine. We used cap-assisted duodenoscopy with narrow-band imaging and a water jet pump device (GIF HQ290, Olympus). All endoscopic procedures were performed with the patient in the left lateral decubitus position. The stomach and the duodenal bulb were initially collapsed by aspiration, followed by instillation of 200-400 mL of water into the antrum and duodenal bulb. After performing UEMR, we removed instilled water as soon as possible to reduce the risk of aspiration pneumonia. The diameter of each neoplasm was less than 15 mm. We achieved en bloc resection with a crescent-type snare (Olympus device) and electrosurgical unit (VAIO 300D, ERBE Co. Ltd., Tubingen, Germany) with a high-frequency generator in all 4 patients. The settings of the VAIO 300D were as follows: Endocut-Q, effect 2, incision time 3, and incision interval 5. In a 48-year-old woman (Case No. 1), a 10-mm sized Yamada type III polyp on the pyloric ring of the stomach could not be entirely visualized using forward-viewing endoscopes (Figure 1). However, water infusion enabled slight floating of the lesion, and it was easily identified and grasped using a snare. A 64-yearold woman (Case No. 2) presented with a 7-mm sized Yamada type II polyp on the pyloric ring of the stomach. UEMR was performed in the same way as in the first case. In a 50-year-old man (Case No. 3), water infusion enabled slight floating of the lesion, and it was easily grasped using a snare (Figure 2). Finally, in a 60-year-old woman (Case No. 4), a 10-mm sized Yamada type II polyp was successfully removed by UEMR. All procedures were performed within 3 min without adverse events. Pathologic examination showed low-grade dysplasia with a clear resection margin in Case No. 3 and hyperplastic polyps in the other three cases (Table 1).

#### FINAL DIAGNOSIS

Mucosal neoplasm in the pyloric ring of the stomach.

#### TREATMENT

Underwater endoscopic mucosal resection.

#### **OUTCOME AND FOLLOW-UP**

UEMR was successfully performed within 3 min without adverse events in 4 patients with a mucosal neoplasm in the pyloric ring. All patients were discharged without any adverse events after the procedure.

#### DISCUSSION

It is difficult to achieve complete resection of tumors located in the pyloric ring using conventional endoscopic mucosal resection (EMR) or endoscopic submucosal dissection (ESD) due to limited working space, incomplete visualization using forward-viewing endoscopes, and peristaltic contractions of the lesion. These technical difficulties may lead to an increase in local recurrence<sup>[8]</sup>. To overcome incomplete visualization of the entire tumor or to determine the distal tumor margin, retroflexion maneuvers in the duodenum are suggested for the management of tumors in the pyloric ring. Another option is transnasal endoscope-assisted endoscopic resection, which enables submucosal tissue retraction to visualize the cutting line and increase the rate of complete resection<sup>[8-10]</sup>. However, these techniques need highly advanced endoscopic skills and facilities.

Our case series suggested the potential of UEMR for the treatment of neoplasms located in the pyloric ring. UEMR, with a relative short procedure time and low rate of adverse events, does not require high technical skills in endoscopic procedures<sup>[6]</sup>. UEMR for the management of neoplasms in the pyloric ring has benefits similar to those of UEMR for colorectal neoplasms: (1) Superficial lesions float into the snare as protruding lesions in underwater conditions; (2) UEMR decreases the thermal damage to the gastrointestinal wall, which helps prevent delayed perforation; and (3) The resection plane in UEMR is superficial; thus, the submucosal vessels usually remain within the resection wound, whereas in conventional EMR, the submucosal vessels are



WJCC | https://www.wjgnet.com

Table 1 Patient characteristics										
Case No.	Age (yr)/sex	Neoplasm diameter	Yamada classification	Location of the lesion	Procedure time (s)	<i>En bloc</i> resection	Pathology			
1	48/Female	10 mm	III	LC-AW	129	Yes	Hyperplastic polyp			
2	64/Female	7 mm	Π	PW	169	Yes	Hyperplastic polyp			
3	50/Male	10 mm	Ι	GC	147	Yes	Low-grade dysplasia			
4	60/Female	10 mm	П	PW	144	Yes	Hyperplastic polyp			

AW: Anterior wall; GC: Great curvature; LC: Lesser curvature; PW: Posterior wall.

disrupted<sup>[2]</sup>. Moreover, the narrow pyloric lumen is constantly distended, resulting in sufficient working space.

Even though our case series included patients with neoplasms less than 15 mm in diameter located in the pyloric ring, UEMR for mucosal neoplasms involving the pyloric ring can be expected to have advantages over conventional EMR or ESD. Further studies are needed to elucidate the effectiveness and safety of UEMR for larger mucosal neoplasms located in the pyloric ring.

#### CONCLUSION

UEMR can be an effective and safe treatment method for lesions in the pyloric ring of the stomach. Further studies are needed to elucidate the effectiveness and safety of UEMR for variable-sized mucosal neoplasms in the pyloric ring.



Raisbideng® WJCC https://www.wjgnet.com



Figure 1 Underwater endoscopic mucosal resection in the first case. A: Endoscopic view of the polyp in the pyloric ring; B: Filling water around the lesion; C: Snaring of the lesion in water; D: Endoscopic view of the resected area after endoscopic resection; E: The head portion of the resected polyp; F: The stalk portion of the resected polyp.



Baisbideng® WJCC | https://www.wjgnet.com

July 26, 2020 Volume 8 Issue 14



Figure 2 Underwater endoscopic mucosal resection in the third case. A: Endoscopic view of the neoplasm in the pyloric ring; B: Endoscopic view of the neoplasm in the pyloric ring under narrow-band imaging; C: Snaring of the lesion in water under narrow-band imaging; D: Endoscopic view of the resected area after endoscopic resection under narrow-band imaging; E: Endoscopic view of the resected area after endoscopic resection.

#### REFERENCES

- Binmoeller KF, Shah JN, Bhat YM, Kane SD. "Underwater" EMR of sporadic laterally spreading 1 nonampullary duodenal adenomas (with video). Gastrointest Endosc 2013; 78: 496-502 [PMID: 23642790 DOI: 10.1016/j.gie.2013.03.1330]
- Yamasaki Y, Uedo N, Takeuchi Y, Higashino K, Hanaoka N, Akasaka T, Kato M, Hamada K, Tonai Y, 2 Matsuura N, Kanesaka T, Arao M, Suzuki S, Iwatsubo T, Shichijo S, Nakahira H, Ishihara R, Iishi H. Underwater endoscopic mucosal resection for superficial nonampullary duodenal adenomas. Endoscopy 2018; 50: 154-158 [PMID: 28962044 DOI: 10.1055/s-0043-119214]
- 3 Shibukawa G, Irisawa A, Sato A, Abe Y, Yamabe A, Arakawa N, Takasaki Y, Maki T, Yoshida Y, Igarashi R, Yamamoto S, Ikeda T, Hojo H. Endoscopic Mucosal Resection Performed Underwater for Nonampullary Duodenal Epithelial Tumor: Evaluation of Feasibility and Safety. Gastroenterol Res Pract 2018; 2018: 7490961 [PMID: 30158967 DOI: 10.1155/2018/7490961]
- Binmoeller KF, Hamerski CM, Shah JN, Bhat YM, Kane SD. Underwater EMR of adenomas of the 4 appendiceal orifice (with video). Gastrointest Endosc 2016; 83: 638-642 [PMID: 26375437 DOI: 10.1016/j.gie.2015.08.079
- 5 Ishaq S, Kuwai T. Rectal polyp reaching the dentate line: underwater EMR without submucosal lift. VideoGIE 2017; 2: 53-54 [PMID: 29905259 DOI: 10.1016/j.vgie.2016.12.004]
- Iwagami H, Takeuchi Y, Yamasaki Y, Nakagawa K, Ohmori M, Matsuno K, Inoue S, Iwatsubo T, Nakahira 6 H, Matsuura N, Shichijo S, Maekawa A, Kanesaka T, Higashino K, Uedo N, Ishihara R. Feasibility of underwater endoscopic mucosal resection and management of residues for superficial non-ampullary duodenal epithelial neoplasms. Dig Endosc 2020; 32: 565-573 [PMID: 31550394 DOI: 10.1111/den.13541]
- Shichijo S, Uedo N, Takeuchi Y, Iwagami H, Ohmori M, Inoue S, Ishihara R. Underwater endoscopic



mucosal resection of residual duodenal tumor. Endoscopy 2019; 51: E329-E330 [PMID: 31163493 DOI: 10.1055/a-0919-4357]

- Jung SW, Jeong ID, Bang SJ, Shin JW, Park NH, Kim DH. Successful outcomes of endoscopic resection for 8 gastric adenomas and early cancers located on the pyloric ring (with video). Gastrointest Endosc 2010; 71: 625-629 [PMID: 20189526 DOI: 10.1016/j.gie.2009.10.056]
- 9 Park JC, Kim JH, Youn YH, Cheoi K, Chung H, Kim H, Lee H, Shin SK, Lee SK, Kim H, Park H, Lee SI, Lee YC. How to manage pyloric tumours that are difficult to resect completely with endoscopic resection: comparison of the retroflexion vs. forward view technique. Dig Liver Dis 2011; 43: 958-964 [PMID: 21920829 DOI: 10.1016/j.dld.2011.08.008]
- 10 Ahn JY, Choi KD, Choi JY, Kim MY, Lee JH, Choi KS, Kim DH, Song HJ, Lee GH, Jung HY, Kim JH. Transnasal endoscope-assisted endoscopic submucosal dissection for gastric adenoma and early gastric cancer in the pyloric area: a case series. Endoscopy 2011; 43: 233-235 [PMID: 21165828 DOI: 10.1055/s-0030-1256037]





## Published by Baishideng Publishing Group Inc 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA Telephone: +1-925-3991568 E-mail: bpgoffice@wjgnet.com Help Desk: https://www.f6publishing.com/helpdesk https://www.wjgnet.com

