

# World Journal of *Clinical Cases*

*World J Clin Cases* 2022 June 26; 10(18): 5934-6340



### MINIREVIEWS

- 5934** Development of clustered regularly interspaced short palindromic repeats/CRISPR-associated technology for potential clinical applications  
*Huang YY, Zhang XY, Zhu P, Ji L*
- 5946** Strategies and challenges in treatment of varicose veins and venous insufficiency  
*Gao RD, Qian SY, Wang HH, Liu YS, Ren SY*
- 5957** Diabetes mellitus susceptibility with varied diseased phenotypes and its comparison with phenome interactome networks  
*Rout M, Kour B, Vuree S, Lulu SS, Medicherla KM, Suravajhala P*

### ORIGINAL ARTICLE

#### Clinical and Translational Research

- 5965** Identification of potential key molecules and signaling pathways for psoriasis based on weighted gene co-expression network analysis  
*Shu X, Chen XX, Kang XD, Ran M, Wang YL, Zhao ZK, Li CX*
- 5984** Construction and validation of a novel prediction system for detection of overall survival in lung cancer patients  
*Zhong C, Liang Y, Wang Q, Tan HW, Liang Y*

#### Case Control Study

- 6001** Effectiveness and postoperative rehabilitation of one-stage combined anterior-posterior surgery for severe thoracolumbar fractures with spinal cord injury  
*Zhang B, Wang JC, Jiang YZ, Song QP, An Y*

#### Retrospective Study

- 6009** Prostate sclerosing adenopathy: A clinicopathological and immunohistochemical study of twelve patients  
*Feng RL, Tao YP, Tan ZY, Fu S, Wang HF*
- 6021** Value of magnetic resonance diffusion combined with perfusion imaging techniques for diagnosing potentially malignant breast lesions  
*Zhang H, Zhang XY, Wang Y*
- 6032** Scar-centered dilation in the treatment of large keloids  
*Wu M, Gu JY, Duan R, Wei BX, Xie F*
- 6039** Application of a novel computer-assisted surgery system in percutaneous nephrolithotomy: A controlled study  
*Qin F, Sun YF, Wang XN, Li B, Zhang ZL, Zhang MX, Xie F, Liu SH, Wang ZJ, Cao YC, Jiao W*

- 6050** Influences of etiology and endoscopic appearance on the long-term outcomes of gastric antral vascular ectasia

*Kwon HJ, Lee SH, Cho JH*

#### Randomized Controlled Trial

- 6060** Evaluation of the clinical efficacy and safety of TST33 mega hemorrhoidectomy for severe prolapsed hemorrhoids

*Tao L, Wei J, Ding XF, Ji LJ*

- 6069** Sequential chemotherapy and icotinib as first-line treatment for advanced epidermal growth factor receptor-mutated non-small cell lung cancer

*Sun SJ, Han JD, Liu W, Wu ZY, Zhao X, Yan X, Jiao SC, Fang J*

#### Randomized Clinical Trial

- 6082** Impact of preoperative carbohydrate loading on gastric volume in patients with type 2 diabetes

*Lin XQ, Chen YR, Chen X, Cai YP, Lin JX, Xu DM, Zheng XC*

#### META-ANALYSIS

- 6091** Efficacy and safety of adalimumab in comparison to infliximab for Crohn's disease: A systematic review and meta-analysis

*Yang HH, Huang Y, Zhou XC, Wang RN*

#### CASE REPORT

- 6105** Successful treatment of acute relapse of chronic eosinophilic pneumonia with benralizumab and without corticosteroids: A case report

*Izhakian S, Pertzov B, Rosengarten D, Kramer MR*

- 6110** Pembrolizumab-induced Stevens-Johnson syndrome in advanced squamous cell carcinoma of the lung: A case report and review of literature

*Wu JY, Kang K, Yi J, Yang B*

- 6119** Hepatic epithelioid hemangioendothelioma after thirteen years' follow-up: A case report and review of literature

*Mo WF, Tong YL*

- 6128** Effectiveness and safety of ultrasound-guided intramuscular lauromacrogol injection combined with hysteroscopy in cervical pregnancy treatment: A case report

*Ye JP, Gao Y, Lu LW, Ye YJ*

- 6136** Carcinoma located in a right-sided sigmoid colon: A case report

*Lyu LJ, Yao WW*

- 6141** Subcutaneous infection caused by *Mycobacterium abscessus* following cosmetic injections of botulinum toxin: A case report

*Deng L, Luo YZ, Liu F, Yu XH*

- 6148** Overlapping syndrome of recurrent anti-N-methyl-D-aspartate receptor encephalitis and anti-myelin oligodendrocyte glycoprotein demyelinating diseases: A case report  
*Yin XJ, Zhang LF, Bao LH, Feng ZC, Chen JH, Li BX, Zhang J*
- 6156** Liver transplantation for late-onset ornithine transcarbamylase deficiency: A case report  
*Fu XH, Hu YH, Liao JX, Chen L, Hu ZQ, Wen JL, Chen SL*
- 6163** Disseminated strongyloidiasis in a patient with rheumatoid arthritis: A case report  
*Zheng JH, Xue LY*
- 6168** CYP27A1 mutation in a case of cerebrotendinous xanthomatosis: A case report  
*Li ZR, Zhou YL, Jin Q, Xie YY, Meng HM*
- 6175** Postoperative multiple metastasis of clear cell sarcoma-like tumor of the gastrointestinal tract in adolescent: A case report  
*Huang WP, Li LM, Gao JB*
- 6184** Toripalimab combined with targeted therapy and chemotherapy achieves pathologic complete response in gastric carcinoma: A case report  
*Liu R, Wang X, Ji Z, Deng T, Li HL, Zhang YH, Yang YC, Ge SH, Zhang L, Bai M, Ning T, Ba Y*
- 6192** Presentation of Boerhaave's syndrome as an upper-esophageal perforation associated with a right-sided pleural effusion: A case report  
*Tan N, Luo YH, Li GC, Chen YL, Tan W, Xiang YH, Ge L, Yao D, Zhang MH*
- 6198** Camrelizumab-induced anaphylactic shock in an esophageal squamous cell carcinoma patient: A case report and review of literature  
*Liu K, Bao JF, Wang T, Yang H, Xu BP*
- 6205** Nontraumatic convexal subarachnoid hemorrhage: A case report  
*Chen HL, Li B, Chen C, Fan XX, Ma WB*
- 6211** Growth hormone ameliorates hepatopulmonary syndrome and nonalcoholic steatohepatitis secondary to hypopituitarism in a child: A case report  
*Zhang XY, Yuan K, Fang YL, Wang CL*
- 6218** Vancomycin dosing in an obese patient with acute renal failure: A case report and review of literature  
*Xu KY, Li D, Hu ZJ, Zhao CC, Bai J, Du WL*
- 6227** Insulinoma after sleeve gastrectomy: A case report  
*Lobaton-Ginsberg M, Sotelo-González P, Ramirez-Renteria C, Juárez-Aguilar FG, Ferreira-Hermosillo A*
- 6234** Primary intestinal lymphangiectasia presenting as limb convulsions: A case report  
*Cao Y, Feng XH, Ni HX*
- 6241** Esophagogastric junctional neuroendocrine tumor with adenocarcinoma: A case report  
*Kong ZZ, Zhang L*



- 6247** Foreign body granuloma in the tongue differentiated from tongue cancer: A case report  
*Jiang ZH, Xu R, Xia L*
- 6254** Modified endoscopic ultrasound-guided selective N-butyl-2-cyanoacrylate injections for gastric variceal hemorrhage in left-sided portal hypertension: A case report  
*Yang J, Zeng Y, Zhang JW*
- 6261** Management of type IIb dens invaginatus using a combination of root canal treatment, intentional replantation, and surgical therapy: A case report  
*Zhang J, Li N, Li WL, Zheng XY, Li S*
- 6269** Clivus-involved immunoglobulin G4 related hypertrophic pachymeningitis mimicking meningioma: A case report  
*Yu Y, Lv L, Yin SL, Chen C, Jiang S, Zhou PZ*
- 6277** De novo brain arteriovenous malformation formation and development: A case report  
*Huang H, Wang X, Guo AN, Li W, Duan RH, Fang JH, Yin B, Li DD*
- 6283** Coinfection of *Streptococcus suis* and *Nocardia asiatica* in the human central nervous system: A case report  
*Chen YY, Xue XH*
- 6289** Dilated left ventricle with multiple outpouchings – a severe congenital ventricular diverticulum or left-dominant arrhythmogenic cardiomyopathy: A case report  
*Zhang X, Ye RY, Chen XP*
- 6298** Spontaneous healing of complicated crown-root fractures in children: Two case reports  
*Zhou ZL, Gao L, Sun SK, Li HS, Zhang CD, Kou WW, Xu Z, Wu LA*
- 6307** Thyroid follicular renal cell carcinoma excluding thyroid metastases: A case report  
*Wu SC, Li XY, Liao BJ, Xie K, Chen WM*
- 6314** Appendiceal bleeding: A case report  
*Zhou SY, Guo MD, Ye XH*
- 6319** Spontaneous healing after conservative treatment of isolated grade IV pancreatic duct disruption caused by trauma: A case report  
*Mei MZ, Ren YF, Mou YP, Wang YY, Jin WW, Lu C, Zhu QC*
- 6325** Pneumonia and seizures due to hypereosinophilic syndrome – organ damage and eosinophilia without synchronisation: A case report  
*Ishida T, Murayama T, Kobayashi S*
- 6333** Creutzfeldt-Jakob disease presenting with bilateral hearing loss: A case report  
*Na S, Lee SA, Lee JD, Lee ES, Lee TK*

**LETTER TO THE EDITOR**

- 6338** Stem cells as an option for the treatment of COVID-19  
*Cuevas-González MV, Cuevas-González JC*

**ABOUT COVER**

Editorial Board Member of *World Journal of Clinical Cases*, Cristina Tudoran, PhD, Assistant Professor, Department VII, Internal Medicine II, Discipline of Cardiology, "Victor Babes" University of Medicine and Pharmacy Timisoara, Timisoara 300041, Timis, Romania. cristina13.tudoran@gmail.com

**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, Scopus, PubMed, and PubMed Central. The 2021 Edition of Journal Citation Reports® cites the 2020 impact factor (IF) for WJCC as 1.337; IF without journal self cites: 1.301; 5-year IF: 1.742; Journal Citation Indicator: 0.33; Ranking: 119 among 169 journals in medicine, general and internal; and Quartile category: Q3. The WJCC's CiteScore for 2020 is 0.8 and Scopus CiteScore rank 2020: General Medicine is 493/793.

**RESPONSIBLE EDITORS FOR THIS ISSUE**

Production Editor: *Ying-Yi Yuan*, Production Department Director: *Xu Guo*, Editorial Office Director: *Jin-Lei Wang*.

**NAME OF JOURNAL**

*World Journal of Clinical Cases*

**ISSN**

ISSN 2307-8960 (online)

**LAUNCH DATE**

April 16, 2013

**FREQUENCY**

Thrice Monthly

**EDITORS-IN-CHIEF**

Bao-Gan Peng, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati, Ja Hyeon Ku

**EDITORIAL BOARD MEMBERS**

<https://www.wjgnet.com/2307-8960/editorialboard.htm>

**PUBLICATION DATE**

June 26, 2022

**COPYRIGHT**

© 2022 Baishideng Publishing Group Inc

**INSTRUCTIONS TO AUTHORS**

<https://www.wjgnet.com/bpg/gerinfo/204>

**GUIDELINES FOR ETHICS DOCUMENTS**

<https://www.wjgnet.com/bpg/GerInfo/287>

**GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH**

<https://www.wjgnet.com/bpg/gerinfo/240>

**PUBLICATION ETHICS**

<https://www.wjgnet.com/bpg/GerInfo/288>

**PUBLICATION MISCONDUCT**

<https://www.wjgnet.com/bpg/gerinfo/208>

**ARTICLE PROCESSING CHARGE**

<https://www.wjgnet.com/bpg/gerinfo/242>

**STEPS FOR SUBMITTING MANUSCRIPTS**

<https://www.wjgnet.com/bpg/GerInfo/239>

**ONLINE SUBMISSION**

<https://www.f6publishing.com>

# Esophagogastric junctional neuroendocrine tumor with adenocarcinoma: A case report

Zhen-Zhen Kong, Lu Zhang

**Specialty type:** Medicine, research and experimental

**Provenance and peer review:** Unsolicited article; Externally peer reviewed.

**Peer-review model:** Single blind

**Peer-review report's scientific quality classification**

Grade A (Excellent): 0  
Grade B (Very good): 0  
Grade C (Good): C, C, C  
Grade D (Fair): D, D  
Grade E (Poor): 0

**P-Reviewer:** Casella C, Italy; Chiba H, Japan; Hunasanahalli Giriappa V, India; Mohamed SY, Egypt; Viswanath Y, United Kingdom

**Received:** November 30, 2021

**Peer-review started:** November 30, 2021

**First decision:** March 11, 2022

**Revised:** March 16, 2022

**Accepted:** April 27, 2022

**Article in press:** April 27, 2022

**Published online:** June 26, 2022



**Zhen-Zhen Kong, Lu Zhang,** Department of Gastroenterology, The First Affiliated Hospital of Zhejiang Chinese Medical University, Hangzhou 310000, Zhejiang Province, China

**Corresponding author:** Lu Zhang, Department of Gastroenterology, The First Affiliated Hospital of Zhejiang Chinese Medical University, No. 54 Post Road, Shangcheng District, Hangzhou 310000, Zhejiang Province, China. [zl06302021@163.com](mailto:zl06302021@163.com)

## Abstract

### BACKGROUND

At present, cases of esophageal neuroendocrine tumors combined with cardia adenocarcinoma are extremely rare worldwide, and there are no clinical reports. Herein, we describe such a case for clinical reference.

### CASE SUMMARY

The presence of cardia cancer and esophageal neuroendocrine tumors in a single patient has not yet been reported. The patient in this case underwent prompt endoscopic treatment and additional surgical resection. Pathology revealed the following: The distance between the cardia cancer and the esophageal neuroendocrine tumors was small, approximately 3 mm. Vascular invasion was observed. The esophageal neuroendocrine tumor was determined to be grade G3. According to the treatment guidelines, after the patient received an explanation of their condition, additional surgical procedures were provided in a timely manner. Early detection and early treatment can successfully prolong survival and improve the quality of life of patients.

### CONCLUSION

Early detection and early treatment can successfully prolong survival and improve the quality of life of such patients.

**Key Words:** Esophageal neuroendocrine tumor; Cardia moderately differentiated adenocarcinoma; Endoscopic treatment; Surgery; Pathology; Case report

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.

**Core Tip:** Cases of esophageal neuroendocrine tumors combined with moderately differentiated gastric cardia adenocarcinoma are very rare. Pathology is the gold standard for diagnosis. Endoscopy and additional surgical resection proved to be successful in our case. Early detection and early treatment are both of great significance to the life and health of patients. Considering the successful resection of this case, we provide this case report to serve as a clinical reference.

**Citation:** Kong ZZ, Zhang L. Esophagogastric junctional neuroendocrine tumor with adenocarcinoma: A case report. *World J Clin Cases* 2022; 10(18): 6241-6246

**URL:** <https://www.wjgnet.com/2307-8960/full/v10/i18/6241.htm>

**DOI:** <https://dx.doi.org/10.12998/wjcc.v10.i18.6241>

## INTRODUCTION

At present, cases of esophageal neuroendocrine tumors (NETs) combined with cardia adenocarcinoma are extremely rare worldwide. The presence of cardia cancer and esophageal NETs (E-NETs) in a single patient has not yet been reported. Herein, we describe such a case for clinical reference.

## CASE PRESENTATION

### Chief complaints

A 76-year-old man was hospitalized due to the presence of a cardia mass.

### History of present illness

Previous gastroscopy showed a 0-IIa-like cardia lesions and chronic atrophic gastritis with erosions. The pathological examination revealed the following: Tubular adenoma with high-grade intraepithelial neoplasia; mild chronic atrophic gastritis of the antrum; intestinal metaplasia; and *Helicobacter pylori* infection (Figure 1).

### History of past illness

The patient's medical history was unremarkable.

### Personal and family history

The patient's personal/family history was unremarkable.

### Physical examination

No remarkable characteristics were found during the physical examination.

### Laboratory examinations

The laboratory results were all normal.

### Imaging examinations

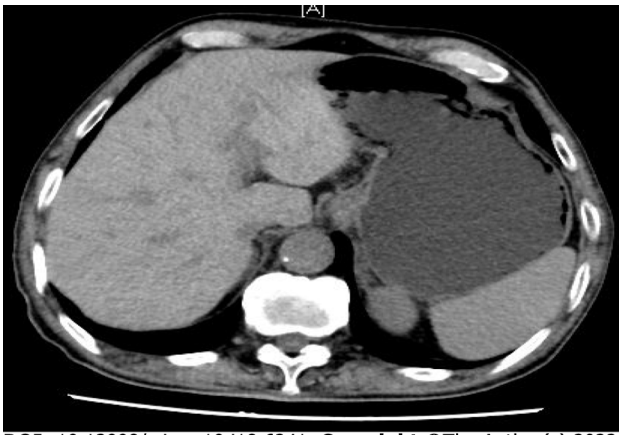
Previous gastroscopy showed a 0-IIa-like lesion of the cardia and chronic atrophic gastritis with erosions. Enhanced computed tomography scan of the full abdomen was performed after hospitalization, which revealed that the local gastric wall of the gastric cardia was slightly thickened, no significantly enlarged lymph node shadow was seen around the cardia, and the rest of the region appeared unchanged (Figures 2-4).

## FINAL DIAGNOSIS

The final diagnosis was differentiated cardia adenocarcinoma and E-NET (G3).

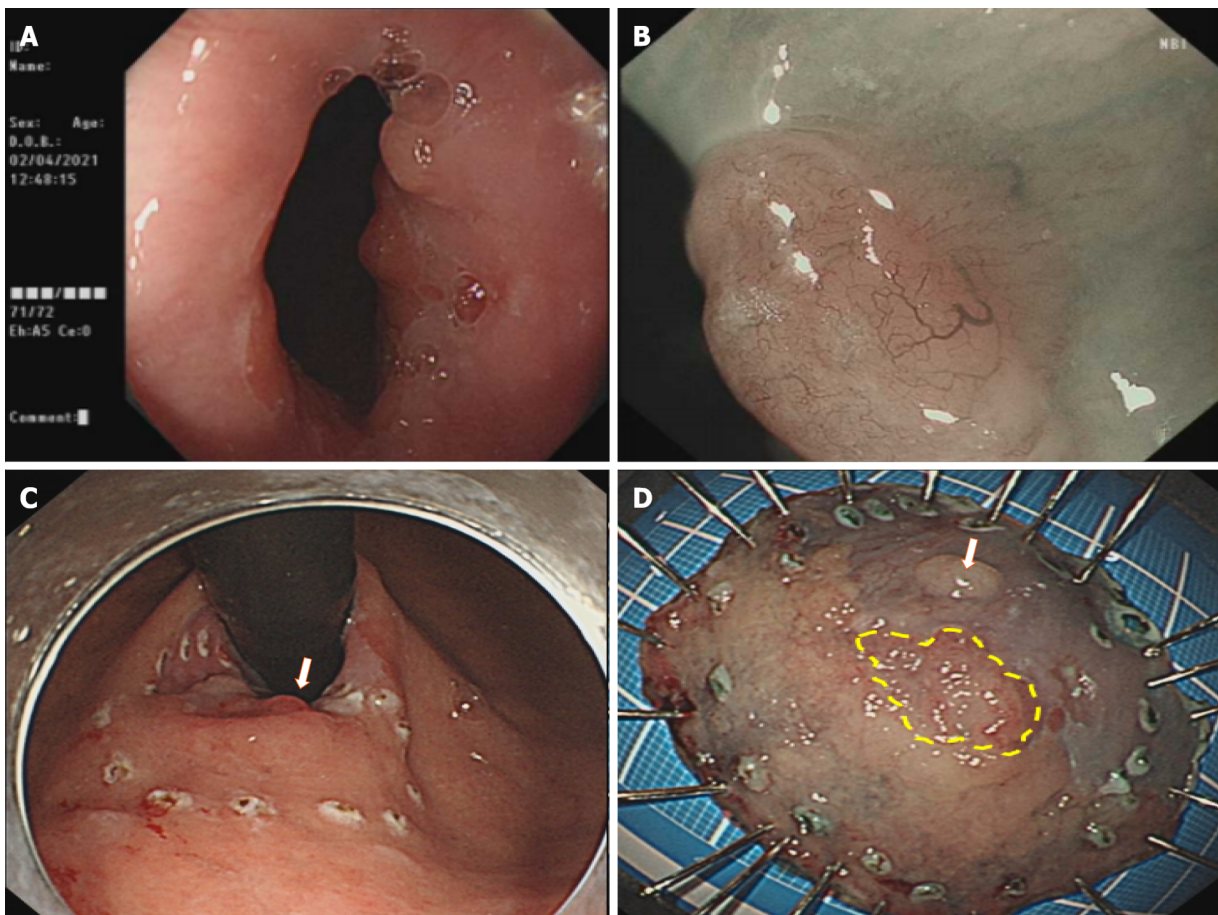
## TREATMENT

Endoscopic submucosal dissection and surgical resection were performed.



DOI: 10.12998/wjcc.v10.i18.6241 Copyright ©The Author(s) 2022.

Figure 1 Full abdominal enhanced computed tomography.



DOI: 10.12998/wjcc.v10.i18.6241 Copyright ©The Author(s) 2022.

Figure 2 Endoscopic submucosal dissection. A: Cardia mass; B: Submucosal injection; C: Tick to mark the lesion area; D: Lesion specimen.

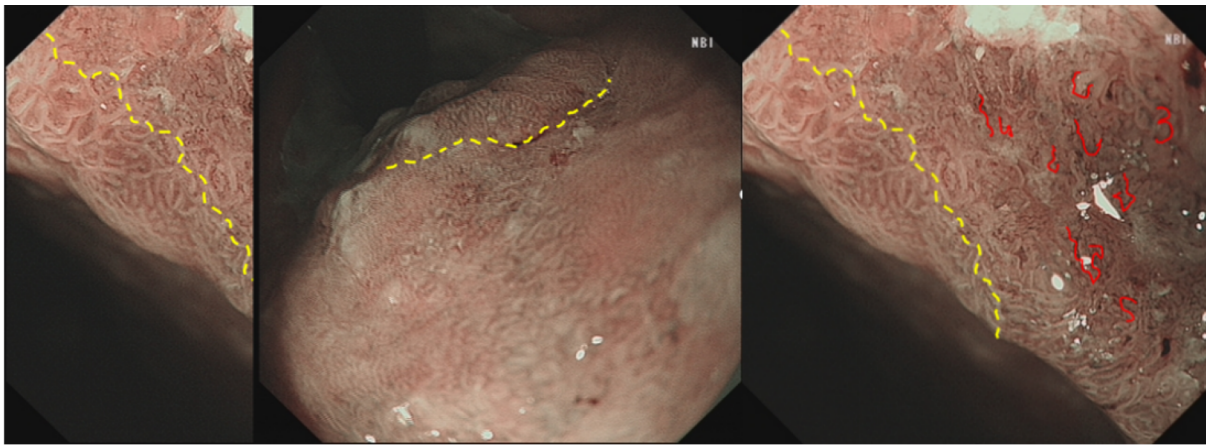
## OUTCOME AND FOLLOW-UP

The patient was in good general condition without obvious discomfort (Figures 5 and 6).

## DISCUSSION

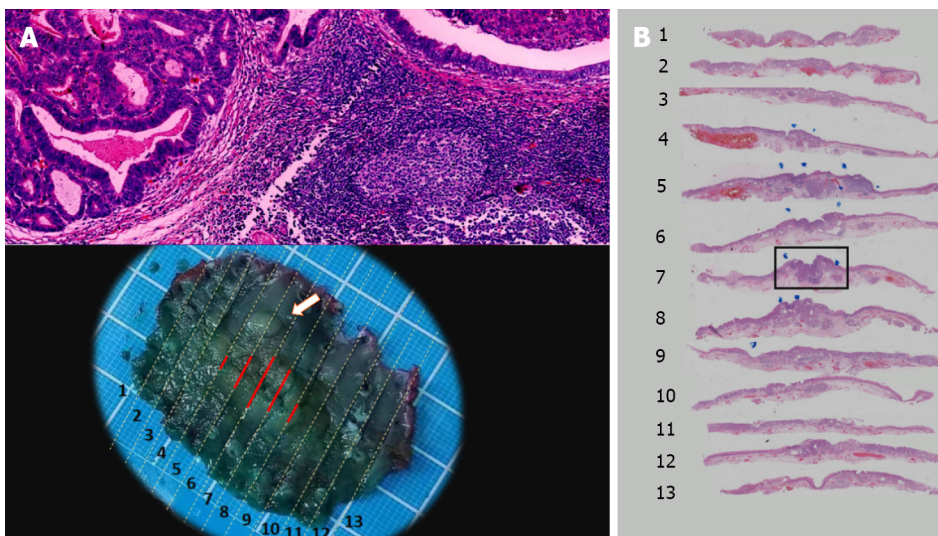
NENs are a group of highly heterogeneous tumors originating from neuroendocrine cells. They can occur in many parts of the body but are most often found in the digestive system, followed by the lungs.





DOI: 10.12998/wjcc.v10.i18.6241 Copyright ©The Author(s) 2022.

Figure 3 Narrow-band imaging.

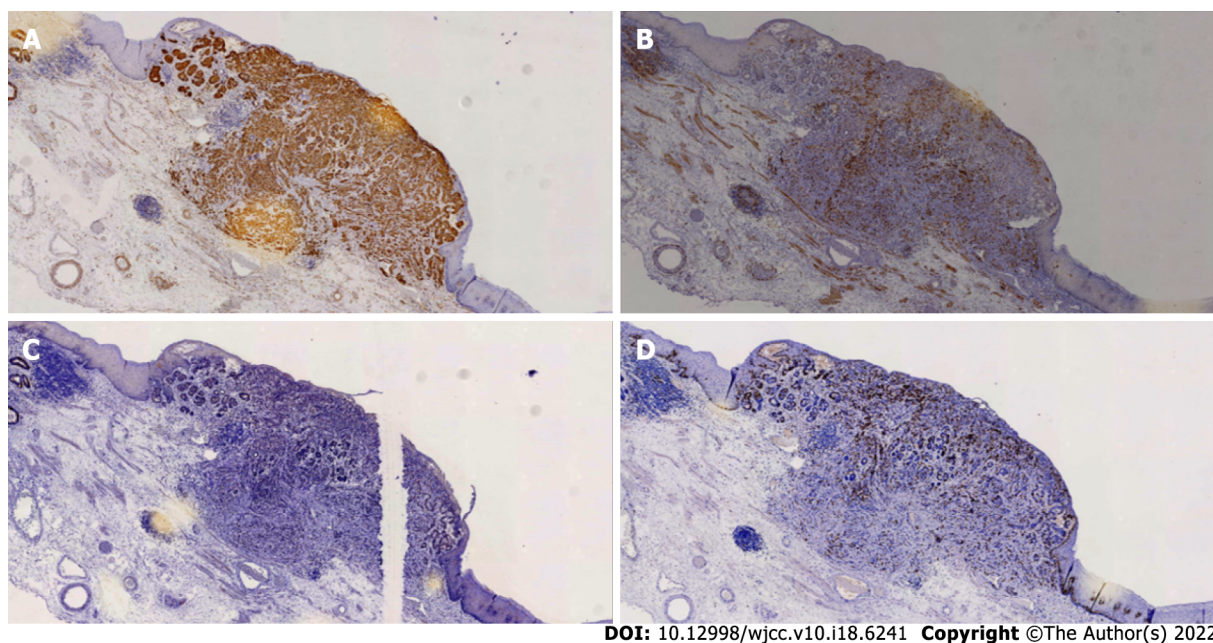


DOI: 10.12998/wjcc.v10.i18.6241 Copyright ©The Author(s) 2022.

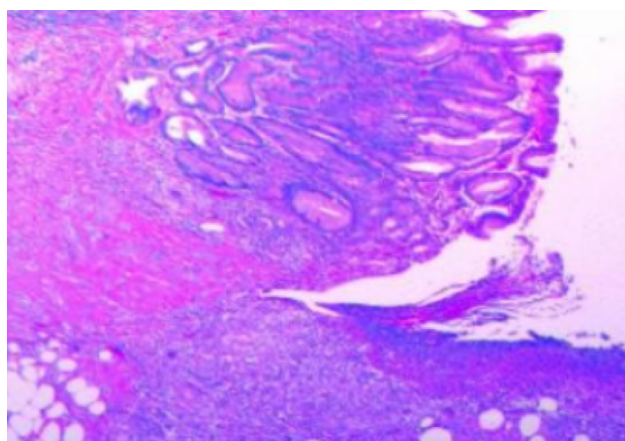
Figure 4 Pathology of cardia endoscopic submucosal dissection specimens. A: Moderately differentiated adenocarcinoma of the cardia; B: Esophageal neuroendocrine tumors (G3).

E-NETs are very rare[1], accounting for only 1.4% of all gastrointestinal pancreatic tumors[2] and 0.15%-2.80% of all esophageal tumors[3]. This is due to the poor development of the neuroendocrine system in this area of the body[2]. The incidence rate varies across countries[4]; these tumors are more commonly found in Asian countries than in Western countries[5]. Studies have found that smoking (present in 49%) and drinking (present in 31%) may be a high-risk factor[6,7]. At present, cases of E-NETs combined with cardia adenocarcinoma are extremely rare worldwide, and there are no clinical reports.

Pathology is the gold standard for the diagnosis of NETs. The proliferation activity of tumor cells can be evaluated by the number of mitotic figures or the Ki-67 index. According to the 2019 WHO classification standards, NETs are divided into three grades: G1, G2, and G3. The classification criteria are as follows: G1 is defined as < 2 mitotic cells/10 high-power fields (HPFs), G2 as 2-20 cells/10 HPFs, and G3 as > 20 cells/10 HPFs. The Ki-67 index is classified as follows: G1, ≤ 2%; G2, 3%-20%; and G3, > 20% [8]. When the Ki-67 index is inconsistent with the mitotic cell classification, it can instead be classified as high or low. DAXX/ATRX and p53/RB mutations can be used to distinguish G3 NETs from neuroendocrine carcinomas (NECs). According to the guidelines, NETs are < 1 cm in size, are grade G1/G2, have a low metastasis rate (< 3%), and do not infiltrate into the muscularis propria (T1 stage). Thus, they are suitable for endoscopic treatment. For tumors or NECs more than 2 cm in diameter, the metastasis rate can reach as high as 60% to 80%, so radical resection is the first choice.



**Figure 5** Immunohistochemical staining of esophageal neuroendocrine tumors. A: Syn; B: CD56; C: CgA; D: Ki-67 (25%+).



**Figure 6** Representative pathology of excised gastric specimens.

## CONCLUSION

A case of cardia adenocarcinoma combined with E-NETs has not yet been reported. In our patient, after timely endoscopic treatment, pathology revealed that the distance between the cardia cancer and the E-NETs was small, approximately 3 mm, vascular invasion was observed, and the E-NET was determined to be grade G3. According to the treatment guidelines, after the patient received an explanation of their condition, additional surgical procedures were provided in a timely manner. Complete resection of the lesion significantly improved the patient's quality of life.

## FOOTNOTES

**Author contributions:** Kong ZZ was involved in writing the article; Zhang L was involved in the conception of the study; all authors read and approved the final manuscript.

**Supported by** Zhejiang Provincial Department of Health Clinical Research Application Project, No. 2022KY924; and General Project of Zhejiang Provincial Department of Health, No. 2021KY835.

**Informed consent statement:** Informed written consent was obtained from the patient for publication of this report and any accompanying images.

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

**CARE Checklist (2016) statement:** The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE 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 noncommercially, and license their derivative works on different terms, provided the original work is properly cited and the use is noncommercial. See: <https://creativecommons.org/licenses/by-nc/4.0/>

**Country/Territory of origin:** China

**ORCID number:** Zhen-Zhen Kong 0000-0002-2177-0974; Lu Zhang 0000-0001-7726-4846.

**S-Editor:** Fan JR

**L-Editor:** Wang TQ

**P-Editor:** Fan JR

## REFERENCES

- 1 **Chin YP**, Lai WF, Chiang MT, Chang SC. Esophageal neuroendocrine tumor with initial presentation as painless forehead and neck masses: A case report. *Medicine (Baltimore)* 2017; **96**: e9282 [PMID: 29390385 DOI: 10.1097/MD.0000000000009282]
- 2 **Lee CG**, Lim YJ, Park SJ, Jang BI, Choi SR, Kim JK, Kim YT, Cho JY, Yang CH, Chun HJ, Song SY; Neuroendocrine tumor study group. The clinical features and treatment modality of esophageal neuroendocrine tumors: a multicenter study in Korea. *BMC Cancer* 2014; **14**: 569 [PMID: 25098730 DOI: 10.1186/1471-2407-14-569]
- 3 **Weinberg JS**, Suki D, Hanbali F, Cohen ZR, Lenzi R, Sawaya R. Metastasis of esophageal carcinoma to the brain. *Cancer* 2003; **98**: 1925-1933 [PMID: 14584076 DOI: 10.1002/cncr.11737]
- 4 **Egashira A**, Morita M, Kumagai R, Taguchi KI, Ueda M, Yamaguchi S, Yamamoto M, Minami K, Ikeda Y, Toh Y. Neuroendocrine carcinoma of the esophagus: Clinicopathological and immunohistochemical features of 14 cases. *PLoS One* 2017; **12**: e0173501 [PMID: 28288180 DOI: 10.1371/journal.pone.0173501]
- 5 **Sorbye H**, Welin S, Langer SW, Vestermark LW, Holt N, Osterlund P, Dueland S, Hofslie E, Guren MG, Ohrling K, Birkemeyer E, Thiis-Evensen E, Biagini M, Gronbaek H, Soveri LM, Olsen IH, Federspiel B, Assmus J, Janson ET, Knigge U. Predictive and prognostic factors for treatment and survival in 305 patients with advanced gastrointestinal neuroendocrine carcinoma (WHO G3): the NORDIC NEC study. *Ann Oncol* 2013; **24**: 152-160 [PMID: 22967994 DOI: 10.1093/annonc/mds276]
- 6 **Wu IC**, Chu YY, Wang YK, Tsai CL, Lin JC, Kuo CH, Shih HY, Chung CS, Hu ML, Sun WC, Wang JP, Wang HP. Clinicopathological features and outcome of esophageal neuroendocrine tumor: A retrospective multicenter survey by the digestive endoscopy society of Taiwan. *J Formos Med Assoc* 2021; **120**: 508-514 [PMID: 32600867 DOI: 10.1016/j.jfma.2020.06.024]
- 7 **Huang Q**, Wu H, Nie L, Shi J, Lebenthal A, Chen J, Sun Q, Yang J, Huang L, Ye Q. Primary high-grade neuroendocrine carcinoma of the esophagus: a clinicopathologic and immunohistochemical study of 42 resection cases. *Am J Surg Pathol* 2013; **37**: 467-483 [PMID: 23426118 DOI: 10.1097/PAS.0b013e31826d2639]
- 8 **Nagtegaal ID**, Odze RD, Klimstra D, Paradis V, Rugge M, Schirmacher P, Washington KM, Carneiro F, Cree IA; WHO Classification of Tumours Editorial Board. The 2019 WHO classification of tumours of the digestive system. *Histopathology* 2020; **76**: 182-188 [PMID: 31433515 DOI: 10.1111/his.13975]





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](mailto:bpgoffice@wjgnet.com)

**Help Desk:** <https://www.f6publishing.com/helpdesk>

<https://www.wjgnet.com>

