World Journal of *Gastroenterology*

World J Gastroenterol 2024 March 14; 30(10): 1261-1469





Published by Baishideng Publishing Group Inc

W J G World Journal of Gastroenterology

Contents

Weekly Volume 30 Number 10 March 14, 2024

EDITORIAL

1261	Bridging the gap: Unveiling the crisis of physical inactivity in inflammatory bowel diseases	
	Stafie R, Singeap AM, Rotaru A, Stanciu C, Trifan A	
1266	Double role of depression in gastric cancer: As a causative factor and as consequence	
	Christodoulidis G, Konstantinos-Eleftherios K, Marina-Nektaria K	
1270	Capsule endoscopy and panendoscopy: A journey to the future of gastrointestinal endoscopy	
	Rosa B, Cotter J	
1280	Vonoprazan-amoxicillin dual regimen with <i>Saccharomyces boulardii</i> as a rescue therapy for <i>Helicobacter pylori</i> : Current perspectives and implications	
	Dirjayanto VJ, Audrey J, Simadibrata DM	
1287	Women health and microbiota: Different aspects of well-being	
	Nannini G, Amedei A	
1291	Nomograms and prognosis for superficial esophageal squamous cell carcinoma	
	Lin HT, Abdelbaki A, Krishna SG	
	REVIEW	
1295	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies	
1295	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i>	
1295	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i> Optimizing nutrition in hepatic cirrhosis: A comprehensive assessment and care approach	
1295 1313	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i> Optimizing nutrition in hepatic cirrhosis: A comprehensive assessment and care approach <i>Mendez-Guerrero O, Carranza-Carrasco A, Chi-Cervera LA, Torre A, Navarro-Alvarez N</i>	
1295 1313 1329	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i> Optimizing nutrition in hepatic cirrhosis: A comprehensive assessment and care approach <i>Mendez-Guerrero O, Carranza-Carrasco A, Chi-Cervera LA, Torre A, Navarro-Alvarez N</i> Optimizing prediction models for pancreatic fistula after pancreatectomy: Current status and future perspectives	
1295 1313 1329	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i> Optimizing nutrition in hepatic cirrhosis: A comprehensive assessment and care approach <i>Mendez-Guerrero O, Carranza-Carrasco A, Chi-Cervera LA, Torre A, Navarro-Alvarez N</i> Optimizing prediction models for pancreatic fistula after pancreatectomy: Current status and future perspectives <i>Yang F, Windsor JA, Fu DL</i>	
1295 1313 1329	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i> Optimizing nutrition in hepatic cirrhosis: A comprehensive assessment and care approach <i>Mendez-Guerrero O, Carranza-Carrasco A, Chi-Cervera LA, Torre A, Navarro-Alvarez N</i> Optimizing prediction models for pancreatic fistula after pancreatectomy: Current status and future perspectives <i>Yang F, Windsor JA, Fu DL</i>	
1295 1313 1329	REVIEW Overview of the immunological mechanisms in hepatitis B virus reactivation: Implications for disease progression and management strategies <i>Ma H, Yan QZ, Ma JR, Li DF, Yang JL</i> Optimizing nutrition in hepatic cirrhosis: A comprehensive assessment and care approach <i>Mendez-Guerrero O, Carranza-Carrasco A, Chi-Cervera LA, Torre A, Navarro-Alvarez N</i> Optimizing prediction models for pancreatic fistula after pancreatectomy: Current status and future perspectives <i>Yang F, Windsor JA, Fu DL</i> ORIGINAL ARTICLE Patroenective Cohort Study	

- 1346 Cumulative effects of excess high-normal alanine aminotransferase levels in relation to new-onset metabolic dysfunction-associated fatty liver disease in China Chen JF, Wu ZQ, Liu HS, Yan S, Wang YX, Xing M, Song XQ, Ding SY
- 1358 Time trends and outcomes of gastrostomy placement in a Swedish national cohort over two decades Skogar ML, Sundbom M



Contents

Weekly Volume 30 Number 10 March 14, 2024

Retrospective Study

1368 Stage at diagnosis of colorectal cancer through diagnostic route: Who should be screened?

Agatsuma N, Utsumi T, Nishikawa Y, Horimatsu T, Seta T, Yamashita Y, Tanaka Y, Inoue T, Nakanishi Y, Shimizu T, Ohno M, Fukushima A, Nakayama T, Seno H

Observational Study

1377 Differential diagnosis of Crohn's disease and intestinal tuberculosis based on ATR-FTIR spectroscopy combined with machine learning

Li YP, Lu TY, Huang FR, Zhang WM, Chen ZQ, Guang PW, Deng LY, Yang XH

Prospective Study

1393 Establishment and validation of an adherence prediction system for lifestyle interventions in non-alcoholic fatty liver disease

Zeng MH, Shi QY, Xu L, Mi YQ

Basic Study

1405 Alkaline sphingomyelinase deficiency impairs intestinal mucosal barrier integrity and reduces antioxidant capacity in dextran sulfate sodium-induced colitis

Tian Y, Li X, Wang X, Pei ST, Pan HX, Cheng YQ, Li YC, Cao WT, Petersen JDD, Zhang P

- 1420 Preliminary exploration of animal models of congenital choledochal cysts Zhang SH, Zhang YB, Cai DT, Pan T, Chen K, Jin Y, Luo WJ, Huang ZW, Chen QJ, Gao ZG
- 1431 Serotonin receptor 2B induces visceral hyperalgesia in rat model and patients with diarrhea-predominant irritable bowel syndrome

Li ZY, Mao YQ, Hua Q, Sun YH, Wang HY, Ye XG, Hu JX, Wang YJ, Jiang M

META-ANALYSIS

Shear-wave elastography to predict hepatocellular carcinoma after hepatitis C virus eradication: A 1450 systematic review and meta-analysis

Esposto G, Santini P, Galasso L, Mignini I, Ainora ME, Gasbarrini A, Zocco MA

LETTER TO THE EDITOR

1461 Current considerations on intraductal papillary neoplasms of the bile duct and pancreatic duct Pavlidis ET. Galanis IN. Pavlidis TE

1466 Are we ready to use new endoscopic scores for ulcerative colitis? Quera R, Núñez F P



Contents

Weekly Volume 30 Number 10 March 14, 2024

ABOUT COVER

Editorial Board Member of World Journal of Gastroenterology, Toru Mizuguchi, MD, PhD, Professor, Surgeon, Department of Nursing, Division of Surgical Science, Sapporo Medical University Postgraduate School of Health Science, Sapporo, Hokkaido 0608556, Japan. tmizu@sapmed.ac.jp

AIMS AND SCOPE

The primary aim of World Journal of Gastroenterology (WJG, World J Gastroenterol) is to provide scholars and readers from various fields of gastroenterology and hepatology with a platform to publish high-quality basic and clinical research articles and communicate their research findings online. WJG mainly publishes articles reporting research results and findings obtained in the field of gastroenterology and hepatology and covering a wide range of topics including gastroenterology, hepatology, gastrointestinal endoscopy, gastrointestinal surgery, gastrointestinal oncology, and pediatric gastroenterology.

INDEXING/ABSTRACTING

The WJG is now abstracted and indexed in Science Citation Index Expanded (SCIE), MEDLINE, PubMed, PubMed Central, Scopus, Reference Citation Analysis, China Science and Technology Journal Database, and Superstar Journals Database. The 2023 edition of Journal Citation Reports® cites the 2022 impact factor (IF) for WJG as 4.3; Quartile category: Q2. The *WJG*'s CiteScore for 2021 is 8.3.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Ying-Yi Yuan; Production Department Director: Xiang Li; Cover Editor: Jia-Ru Fan.

NAME OF JOURNAL	INSTRUCTIONS TO AUTHORS		
World Journal of Gastroenterology	https://www.wjgnet.com/bpg/gerinfo/204		
ISSN	GUIDELINES FOR ETHICS DOCUMENTS		
ISSN 1007-9327 (print) ISSN 2219-2840 (online)	https://www.wjgnet.com/bpg/GerInfo/287		
LAUNCH DATE	GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH		
October 1, 1995	https://www.wjgnet.com/bpg/gerinfo/240		
FREQUENCY	PUBLICATION ETHICS		
Weekly	https://www.wjgnet.com/bpg/GerInfo/288		
EDITORS-IN-CHIEF	PUBLICATION MISCONDUCT		
Andrzej S Tarnawski	https://www.wjgnet.com/bpg/gerinfo/208		
EXECUTIVE ASSOCIATE EDITORS-IN-CHIEF	POLICY OF CO-AUTHORS		
Xian-Jun Yu (Pancreatic Oncology), Jian-Gao Fan (Chronic Liver Disease), Hou- Bao Liu (Biliary Tract Disease)	https://www.wjgnet.com/bpg/GerInfo/310		
EDITORIAL BOARD MEMBERS	ARTICLE PROCESSING CHARGE		
http://www.wjgnet.com/1007-9327/editorialboard.htm	https://www.wjgnet.com/bpg/gerinfo/242		
PUBLICATION DATE	STEPS FOR SUBMITTING MANUSCRIPTS		
March 14, 2024	https://www.wjgnet.com/bpg/GerInfo/239		
COPYRIGHT	ONLINE SUBMISSION		
© 2024 Baishideng Publishing Group Inc	https://www.f6publishing.com		
PUBLISHING PARTNER	PUBLISHING PARTNER'S OFFICIAL WEBSITE		
Shanghai Pancreatic Cancer Institute and Pancreatic Cancer Institute, Fudan	https://www.shca.org.cn https://www.zs.hospital.ch.cn		
Biliary Tract Disease Institute, Fudan University	neps// www.zs.nosphar.sit.ci		
© 2024 Baishideng Publishing Group Inc. All rights reserved. 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA			

E-mail: office@baishideng.com https://www.wjgnet.com



WÛ

World Journal of Gastroenterology

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

World J Gastroenterol 2024 March 14; 30(10): 1291-1294

DOI: 10.3748/wjg.v30.i10.1291

ISSN 1007-9327 (print) ISSN 2219-2840 (online)

EDITORIAL

Nomograms and prognosis for superficial esophageal squamous cell carcinoma

Hong Tao Lin, Ahmed Abdelbaki, Somashekar G Krishna

Specialty type: Gastroenterology and hepatology

Provenance and peer review: Invited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

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

P-Reviewer: Song T, China

Received: January 2, 2024 Peer-review started: January 2, 2024 First decision: January 19, 2024 Revised: January 28, 2024 Accepted: February 25, 2024 Article in press: February 25, 2024 Published online: March 14, 2024



Hong Tao Lin, Ahmed Abdelbaki, Somashekar G Krishna, Department of Internal Medicine, Division of Gastroenterology, Hepatology and Nutrition, The Ohio State University Wexner Medical Center, Columbus, OH 43210, United States

Corresponding author: Somashekar G Krishna, MD, MPH, FASGE, AGAF, Professor, Department of Internal Medicine, Division of Gastroenterology, Hepatology and Nutrition, The Ohio State University Wexner Medical Center, 395 W 12th Avenue, Suite 262, Columbus, OH 43210, United States. somashekar.krishna@osumc.edu

Abstract

In recent years, endoscopic resection, particularly endoscopic submucosal dissection, has become increasingly popular in treating non-metastatic superficial esophageal squamous cell carcinoma (ESCC). In this evolving paradigm, it is crucial to identify factors that predict higher rates of lymphatic invasion and poorer outcomes. Larger tumor size, deeper invasion, poorer differentiation, more infiltrative growth patterns (INF-c), higher-grade tumor budding, positive lymphovascular invasion, and certain biomarkers have been associated with lymph node metastasis and increased morbidity through retrospective reviews, leading to the construction of comprehensive nomograms for outcome prediction. If validated by future prospective studies, these nomograms would prove highly applicable in guiding the selection of treatment for superficial ESCC.

Key Words: Esophageal cancer; Esophageal squamous cell carcinoma; Esophageal resection; Endoscopic mucosal resection; Endoscopic submucosal dissection; Lymph node metastasis

©The Author(s) 2024. Published by Baishideng Publishing Group Inc. All rights reserved.



WJG https://www.wjgnet.com

Core Tip: As endoscopic resection becomes the standard of care for non-metastatic superficial esophageal squamous cell carcinoma (ESCC), it is imperative to identify cases with a high risk of lymphatic invasion. Current retrospective studies suggest an association between lymph node metastasis in superficial ESCC and factors such as larger tumor size, deeper invasion, poorer differentiation, more infiltrative growth patterns (INF-c), higher-grade tumor budding, positive lymphovascular invasion, and specific biomarkers. Future prospective studies are required to validate these findings, isolate other prognostic factors and confounders, and establish a more robust causal relationship.

Citation: Lin HT, Abdelbaki A, Krishna SG. Nomograms and prognosis for superficial esophageal squamous cell carcinoma. World J Gastroenterol 2024; 30(10): 1291-1294

URL: https://www.wjgnet.com/1007-9327/full/v30/i10/1291.htm DOI: https://dx.doi.org/10.3748/wjg.v30.i10.1291

INTRODUCTION

Esophageal cancer ranks as the ninth most prevalent cancer and the sixth leading cause of cancer-related deaths worldwide[1]. Approximately 85% of primary esophageal cancer falls within the esophageal squamous cell carcinoma (ESCC) subtype, with the remainder primarily comprising esophageal adenocarcinoma (EAC)[2]. EAC typically affects the lower third of the esophagus due to gastric reflux, while ESCC predominantly originates from the squamous cells lining the upper and middle esophagus.

The incidence of ESCC is higher in specific regions, including Eastern Asia, Iran, Africa, and South America. It is conversely rare in North America and Europe. Factors such as smoking, alcohol consumption, low socioeconomic status, exposure to polycyclic aromatic hydrocarbons (e.g., from smoked foods and air pollution), and certain dietary habits (e.g., betel nut, hot liquids, pickled foods, and a diet low in fruits and vegetables) are associated with increased rates of ESCC development^[3,4]. While the factors above are the most identified etiologies of ESCC, other causes include TP53 gene alterations, chromosomal alterations, genetic syndromes, slow NAT2 (n-acetyltransferase 2) acetylation, and certain variants of Helicobacter pylori infection[5].

In general, esophageal cancers are linked to significant mortality and morbidity. The mean 5-year survival rates (combining ESCC and EAC) have been estimated to be less than 20%, with worse outcomes in patients with histories of heavy alcohol and tobacco use. Intervention through surgical resection, with or without chemoradiotherapy, modestly improves mean 5-year survival rates to 35%-40%, depending on tumor characteristics[6].

TREATMENT AND PROGNOSIS

While esophageal cancer has historically been treated with surgical esophagectomy, the use of endoscopic resection (ER) for superficial ESCC has gained popularity in recent years as it is minimally invasive and well-tolerated, while also providing tissue samples for histological analysis. Current guidelines recommend ER for select patients due to its efficacy in removing lesions within the muscularis mucosa and some lesions in the submucosa depending on invasion depth[7,8]. However, ER alone is insufficient for tumors with deeper invasion or tumors with a high risk of lymph node metastasis (LNM) or lymphovascular invasion (LVI), necessitating surgical esophagectomy and neoadjuvant chemoradiotherapy (CRT).

While both endoscopic submucosal dissection (ESD) and endoscopic mucosal resection (EMR) fall under the ER umbrella, ESD is superior to EMR, particularly for larger tumor sizes. A retrospective study by Kawashima et al[9] found that for tumors > 15 mm, ESD has a higher *en-bloc* resection rate (100% vs 64.3%, P < 0.001) and a lower 5-year cumulative local recurrence rate (0% vs 8.3%, P < 0.01). Despite EMR and ESD, some high-risk patients may require further treatment for complete tumor eradication.

The retrospective study titled "Risk Factors and a Predictive Nomogram for LNM in Superficial Esophageal Squamous Cell Carcinoma", by Wang et al[10], aims to assess prognostic factors for LNM in patients specifically diagnosed with the ESCC subtype of esophageal cancer. Investigators enrolled patients with superficial ESCC undergoing esophagectomy and lymph node dissection. They collected detailed pathological information to comprehensively analyze and identify LNM risk factors. Findings indicated that patients with positive LNM were more likely to have larger tumors, deeper invasion, poorer differentiation, more infiltrative growth patterns (INF-c), higher-grade tumor budding, and positive LVI. Multivariate regression analysis confirmed these factors as independent risk factors for LNM.

Based on these findings, a predictive nomogram incorporating tumor size, invasion depth, tumor differentiation, tumor budding, tumor infiltrative growth pattern, and LVI was developed. The nomogram exhibited good predictive performance (AUC 0.789 and 0.827 on the receiver operating characteristics curve for the training and validation sets, respectively), facilitating the assessment of LNM risk and guiding post-ESD treatment decisions.

Despite the paper's advancements, it is crucial to acknowledge the study's limitations. As this is a retrospective study, there is an increased potential for biases in case selection and the inability to collect other relevant measures (e.g., LNM rates after EMR and ESD, changes in outcome with neoadjuvant CRT, etc.). Despite multivariate regression analysis, there is still an increased risk for confounders with retrospection as the impact of factors such as age, tumor proximity to blood



WJG | https://www.wjgnet.com

and lymphatic vessels, smoking, and alcohol use cannot be ascertained. Additionally, this study excludes cases where fewer than 12 lymph nodes were dissected. Confounders (e.g., from anatomical variation or grossly visible lymphadenopathy due to metastasis) may result in a greater or fewer number of lymph nodes dissected during surgery, and these may influence which cases are selected downstream.

The aims of this study in predicting the outcome of ESCC are not unprecedented. A 2021 retrospective study on 407 ESCC patients demonstrated that a low-performance status [≥ 2 Eastern Cooperative Oncology Group Performance Status (ECOG-PS)] was significantly associated with increased early mortality. Additionally, higher rates of late mortality were associated with male sex, positive smoking history, high ECOG-PS score, high Charlson Comorbidity Index score, low psoas muscle mass index, and low prognostic nutritional index[11]. Moreover, other previous studies have developed similar nomograms for ESCC LNM^[12] and evaluated factors like tumor budding and infiltrative growth patterns^[13,14]. However, this investigation provides additional data from 474 ESCC patients to determine independent LNM risk factors through multivariate regression analysis, with greater statistical power and significance.

CONCLUSION

The emergent popularity of ESD and EMR provides effective tools in the management of superficial early-stage ESCC. These minimally invasive and cost-effective interventions reduce complications and recovery time compared to traditional esophagectomy. However, esophagectomy, along with lymph node dissection and CRT, may be necessary if there is deeper tissue invasion or a high likelihood of LNM or LVI. Therefore, there is significant clinical and financial value in being able to accurately predict cases where esophagectomy and the addition of CRT may be necessary. Due to the limitations associated with current retrospective studies on predicting LNM and LVI with superficial ESCC, future prospective multicenter studies are required to validate the nomogram's reliability. Prospective study designs would reduce selection bias, permit evaluation of other risk factors and confounders, and present stronger arguments for causation. It would also allow for further exploration of LNM rates with ESD as opposed to EMR, which may influence the selection of specific endoscopic techniques in certain patients and circumstances. A prospective avenue of research could explore molecular biomarkers, given their association with specific outcomes. For instance, the lack of phosphatase and tensin homolog (PTEN), a tumor suppressor, correlates with an elevated rate of locoregional LNM in ESCC at 60.5%, compared to cases with PTEN presence at 36.1%. In contrast, heightened expression of STMN1 (stathmin 1), a cytoskeleton regulator, is linked to a higher 3-year post-surgery LNM rate of 52%, as opposed to cases with low STMN1 expression at 33.8% [15]. Recent studies show potential in predicting locoregional metastasis and poorer outcomes in patients with superficial ESCC. Upon validation in future research, these findings could lead to the development of enhanced guidelines that facilitate improved identification of patients likely to benefit from ESD and EMR procedures.

FOOTNOTES

Author contributions: Lin HT, Abdelbaki A, and Krishna SG wrote the paper; all authors have read and approved the final manuscript.

Conflict-of-interest statement: None of the authors have any relevant conflicts to disclose.

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: https://creativecommons.org/Licenses/by-nc/4.0/

Country/Territory of origin: United States

ORCID number: Hong Tao Lin 0000-0002-1888-2860; Ahmed Abdelbaki 0009-0000-8194-238X; Somashekar G Krishna 0000-0001-5748-7890.

S-Editor: Lin C L-Editor: A P-Editor: Zhao YQ

REFERENCES

- 1 Mukkamalla SKR, Recio-Boiles A, Babiker HM. Esophageal Cancer. 2023 Mar 7. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan- [PMID: 29083661]
- 2 Morgan E, Soerjomataram I, Rumgay H, Coleman HG, Thrift AP, Vignat J, Laversanne M, Ferlay J, Arnold M. The Global Landscape of Esophageal Squamous Cell Carcinoma and Esophageal Adenocarcinoma Incidence and Mortality in 2020 and Projections to 2040: New Estimates From GLOBOCAN 2020. Gastroenterology 2022; 163: 649-658.e2 [PMID: 35671803 DOI: 10.1053/j.gastro.2022.05.054]
- 3 Abnet CC, Arnold M, Wei WQ. Epidemiology of Esophageal Squamous Cell Carcinoma. Gastroenterology 2018; 154: 360-373 [PMID: 28823862 DOI: 10.1053/j.gastro.2017.08.023]
- 4 Sheikh M, Roshandel G, McCormack V, Malekzadeh R. Current Status and Future Prospects for Esophageal Cancer. Cancers (Basel) 2023; 15



Lin HT et al. Nomograms and prognosis for superficial ESCC

[PMID: 36765722 DOI: 10.3390/cancers15030765]

- Tarazi M, Chidambaram S, Markar SR. Risk Factors of Esophageal Squamous Cell Carcinoma beyond Alcohol and Smoking. Cancers (Basel) 5 2021; **13** [PMID: 33671026 DOI: 10.3390/cancers13051009]
- Lundberg E, Lagergren P, Mattsson F, Lagergren J. Life Expectancy in Survivors of Esophageal Cancer Compared with the Background 6 Population. Ann Surg Oncol 2022; 29: 2805-2811 [PMID: 35190948 DOI: 10.1245/s10434-022-11416-4]
- Barret M, Prat F. Diagnosis and treatment of superficial esophageal cancer. Ann Gastroenterol 2018; 31: 256-265 [PMID: 29720850 DOI: 7 10.20524/aog.2018.0252]
- Park CH, Yang DH, Kim JW, Kim JH, Min YW, Lee SH, Bae JH, Chung H, Choi KD, Park JC, Lee H, Kwak MS, Kim B, Lee HJ, Lee HS, 8 Choi M, Park DA, Lee JY, Byeon JS, Park CG, Cho JY, Lee ST, Chun HJ. Clinical Practice Guideline for Endoscopic Resection of Early Gastrointestinal Cancer. Clin Endosc 2020; 53: 142-166 [PMID: 32252507 DOI: 10.5946/ce.2020.032]
- 9 Kawashima K, Abe S, Koga M, Nonaka S, Suzuki H, Yoshinaga S, Oda I, Hikichi T, Ohira H, Saito Y. Optimal selection of endoscopic resection in patients with esophageal squamous cell carcinoma: endoscopic mucosal resection vs endoscopic submucosal dissection according to lesion size. Dis Esophagus 2021; 34 [PMID: 32959874 DOI: 10.1093/dote/doaa096]
- Wang J, Zhang X, Gan T, Rao NN, Deng K, Yang JL. Risk factors and a predictive nomogram for lymph node metastasis in superficial 10 esophageal squamous cell carcinoma. World J Gastroenterol 2023; 29: 6138-6147 [PMID: 38186680 DOI: 10.3748/wjg.v29.i47.6138]
- Ogata Y, Hatta W, Koike T, Saito M, Jin X, Nakagawa K, Kanno T, Uno K, Asano N, Imatani A, Nakamura T, Nakaya N, Masamune A. 11 Predictors of Early and Late Mortality after Endoscopic Resection for Esophageal Squamous Cell Carcinoma. Tohoku J Exp Med 2021; 253: 29-39 [PMID: 33441512 DOI: 10.1620/tjem.253.29]
- 12 Shen W, Shen Y, Tan L, Jin C, Xi Y. A nomogram for predicting lymph node metastasis in surgically resected T1 esophageal squamous cell carcinoma. J Thorac Dis 2018; 10: 4178-4185 [PMID: 30174862 DOI: 10.21037/jtd.2018.06.51]
- 13 Li Z, Liu L, Wang B, Ying J, He J, Xue L. Tumor budding and tumor-infiltrating lymphocytes can predict prognosis in pT1b esophageal squamous cell carcinoma. Thorac Cancer 2023; 14: 2608-2617 [PMID: 37466146 DOI: 10.1111/1759-7714.15043]
- Zhao Y, Xu E, Yang X, Zhang Y, Chen H, Wang Y, Jin M. Tumor infiltrative growth pattern correlates with the immune microenvironment 14 and is an independent factor for lymph node metastasis and prognosis in stage T1 esophageal squamous cell carcinoma. Virchows Arch 2020; 477: 401-408 [PMID: 32232560 DOI: 10.1007/s00428-020-02801-z]
- Li J, Qi Z, Hu YP, Wang YX. Possible biomarkers for predicting lymph node metastasis of esophageal squamous cell carcinoma: a review. J 15 Int Med Res 2019; 47: 544-556 [PMID: 30616477 DOI: 10.1177/0300060518819606]





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

