

Name of Journal: *World Journal of Gastroenterology*

Manuscript NO: 62488

Manuscript Type: MINIREVIEWS

Artificial intelligence-assisted endoscopic detection of esophageal neoplasia in early stage: The next step?

Liu Y *et al.* AI-assisted endoscopic detection of early EC

Yong Liu

Abstract

Esophageal cancer (EC) is one of the common malignant tumors of the digestive tract, which originates from the epithelium of the esophageal mucosa. It has been confirmed that early EC lesions can be cured by endoscopic therapy and the curative effect is equivalent to that of surgical operation. Upper gastrointestinal endoscopy is still the gold standard for EC diagnosis. The accuracy of endoscopic examination results largely

Match Overview

1	Internet 161 words crawled on 22-Sep-2020 www.wjnet.com	3%
2	Internet 134 words crawled on 28-Jul-2020 www.researchgate.net	2%
3	Internet 82 words crawled on 18-Dec-2019 www.ueg.eu	1%
4	Internet 81 words crawled on 30-Nov-2020 www.tandfonline.com	1%
5	Crossref 58 words Huiyan Luo, Guoliang Xu, Chaofeng Li, Longjun He et al "Real-time artificial intelligence for detection of upper ga ...	1%
6	Crossref 57 words Shyam J. Thakkar, Gursimran S. Kochhar. "Artificial intelli gence for real-time detection of early esophageal cance ...	1%
7	Internet 48 words doi.org	1%
8	Crossref 43 words Noha Ghatwary, Massoud Zolgharni, Xujiang Ye. "Early e sophageal adenocarcinoma detection using deep learni ...	1%

Artificial intelligence-assisted endoscopic detection of esophageal n



ALL

IMAGES

VIDEOS

49,900 Results

Any time ▾

Diagnostic outcomes of esophageal cancer by artificial ...

<https://www.sciencedirect.com/science/article/pii/S0016510718329262>

Jan 01, 2019 · Therefore, early detection is of great importance. It is difficult to make an endoscopic diagnosis of ESCC during the early stages with white-light imaging (WLI) alone. Iodine staining has been used as the preferred method of screening in high-risk patients.

Cited by: 143

Author: Yoshimasa Horie, Yoshimasa Horie, Tosh...

Publish Year: 2019

(PDF) Artificial Intelligence and Its Role in Identifying ...

<https://www.researchgate.net/publication/344737178...>

Background and aims: The visual detection of early esophageal neoplasia (high-grade dysplasia and T1 cancer) in Barrett's esophagus (BE) with white-light and virtual chromoendoscopy still remains ...

PEOPLE ALSO ASK

Can deep learning detect esophageal cancer? ▾

Can CNN detect esophageal cancer? ▾

Why is endoscopic artificial intelligence important? ▾

Can endoscopy detect upper GI cancer? ▾

[Feedback](#)

Artificial intelligence for cancer detection of the upper ...

<https://onlinelibrary.wiley.com/doi/10.1111/den.13897>

Nov 21, 2020 · Hashimoto et al. 64 reported a system that achieved not only an accurate detection of early esophageal neoplasia in BE images, but also localization accuracy. The AI system accurately detected early neoplasia, with a mean average precision of 0.7533. Groof et al. 65 worked on developing an AI system for Barrett's neoplasia detection. Moreover ...

Author: Hideo Suzuki, Yoshitaka Tokai, Toshiy...

Publish Year: 2020

Artificial intelligence in gastrointestinal endoscopy ...

<https://www.sciencedirect.com/science/article/pii/S2468448120302721>

网页

图片

视频

学术

词典

地图

检测到您输入了英文，试试切换到国际版？搜英文结果更丰富更准确

4,310 条结果

时间不限

(PDF) Role of artificial intelligence in the diagnosis of ... 翻译此页

https://www.researchgate.net/publication/344658988_Role_of_artificial_intelligence_in...

Role of artificial intelligence in the diagnosis of oesophageal neoplasia: 2020 an endoscopic odyssey

October 2020 World Journal of Gastroenterology 26(38):5784-5796

(PDF) Artificial Intelligence and Its Role in Identifying ... 翻译此页

https://www.researchgate.net/publication/344737178_Artificial_Intelligence_and_Its...

...

Background and aims: The visual detection of early esophageal neoplasia (high-grade dysplasia and T1 cancer) in Barrett's esophagus (BE) with white-light and virtual chromoendoscopy still remains ...

Artificial Intelligence and Its Role in ... 5 分钟阅读时长 | 翻译此页

https://link.springer.com/article/10.1007/s10620-020-06643-2

2020-10-15 · Randomized trials have demonstrated that ablation of dysplastic Barrett's esophagus can reduce the risk of progression to cancer. Endoscopic resection for early stage esophageal adenocarcinoma and squamous cell carcinoma can significantly reduce postoperative morbidity compared to esophagectomy. Unfortunately, current endoscopic surveillance technologies (e.g., high ...

Author: Taseen Syed, Akash Doshi, Shan Gule... Publish Year: 2020

Diagnostic outcomes of esophageal cancer by artificial ... 翻译此页

https://www.sciencedirect.com/science/article/pii/S0016510718329262

2019-1-1 · When esophageal cancer is diagnosed at an advanced stage, it requires a highly invasive treatment, and its prognosis is poor. Therefore, early detection is of great importance. It is difficult to make an endoscopic diagnosis of ESCC during the early stages with white-light imaging (WLI) alone.

Can artificial intelligence accurately diagnose ... 翻译此页

https://abdominalkey.com/can-artificial-intelligence-accurately-diagnose...

In this review, we highlight that artificial intelligence platforms can now quantify the depth of invasion of esophageal, gastric, and colorectal neoplasia. While real-time performance evaluation is needed, this represents a significant advancement in endoscopic tissue resection and carries the potential to provide real-time guidance for ...

Artificial intelligence for cancer detection of the upper ... 翻译此页

https://onlinelibrary.wiley.com/doi/10.1111/den.13897

Example of detection of early gastric cancer by AI. (a) White light image of early gastric cancer in the body of the stomach, similar to gastritis and difficult to find. (b) Artificial intelligence (AI) indicates the area recognized as a cancer suspected lesion by enclosing it in a blue rectangle.

Author: Hideo Suzuki, Tokai Yoshitaka, Toshiyu... Publish Year: 2021

The role for artificial intelligence in evaluation of ... 翻译此页

https://www.tigejournal.org/article/S1096-2883(19)30072-5/fulltext

With the application of artificial intelligence (AI) in deep learning, it has become possible to develop an AI that can be used clinically even in the field of upper endoscopy, which has been said to be difficult to diagnose. This review summarizes current studies on upper gastrointestinal tract based on AI and deep learning. At present, AI research on gastric cancer detection, Helicobacter ...

Real-time artificial intelligence for detection of upper ... 翻译此页

https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(19)30637-0/fulltext

To the best of our knowledge, this is the largest study in the field of artificial intelligence-guided cancer detection based on upper gastrointestinal endoscopic images worldwide. The endoscopic diagnosis of upper gastrointestinal cancer is subjective and to a great extent relies ...

Can artificial intelligence accurately diagnose ... 翻译此页

https://www.tigejournal.org/article/S1096-2883(19)30078-6/fulltext

Endoscopic tissue resection is a rapidly evolving field. En bloc resection techniques, specifically endoscopic submucosal dissection, allow for organ-sparing curative endoscopic resection for early gastrointestinal cancers. However, using current techniques to quantify depth of invasion, it remains difficult for endoscopists to reliably select optimal endoscopic submucosal dissection candidates.

Emerging artificial intelligence applications in ... 翻译此页

https://www.wjgnet.com/2689-7164/full/v1/i1/6.htm

Endoscopic trimodal imaging versus standard video endoscopy for detection of early Barrett's neoplasia: a multicenter, randomized, crossover study in general practice. Gastrointest Endosc . 2011; 73 :195-203.

小冰

话说你们人类怎么什么都好奇呀？

回复小冰

ALL

IMAGES

VIDEOS

MAPS

NEWS

SHOPPING

54,800 Results

Any time ▾

Artificial intelligence for cancer detection of the upper ...

<https://onlinelibrary.wiley.com/doi/10.1111/den.13897>

Nov 21, 2020 · Hashimoto et al. 64 reported a system that achieved not only an accurate **detection** of **early esophageal neoplasia** in BE images, but also localization accuracy. The AI system accurately detected **early neoplasia**, with a mean average precision of 0.7533. Groof et al. 65 worked on developing an AI system for Barrett's **neoplasia detection**. Moreover, overlapped neoplastic area delineated by ...

Author: Hideo Suzuki, Tokai Yoshitaka, Toshiyu...

Publish Year: 2021

Artificial intelligence using convolutional neural ...

<https://www.sciencedirect.com/science/article/pii/S0016510720300262>

Jun 01, 2020 · The visual **detection** of **early esophageal neoplasia** (high-grade dysplasia and T1 cancer) in Barrett's **esophagus** (BE) with white-light and virtual chromoendoscopy still remains challenging. The aim of this study was to assess whether a convolutional neural **artificial** intelligence network can aid in the recognition of **early esophageal neoplasia** in BE.

Cited by: 24

Author: Rintaro Hashimoto, James Requa, Tyler Da...

Publish Year: 2020

PEOPLE ALSO ASK

Can deep learning detect esophageal cancer? ▾

Why is endoscopic artificial intelligence important? ▾

Can endoscopy detect upper GI cancer? ▾

Can CNN detect esophageal cancer? ▾

Feedback

Artificial Intelligence-assisted System Improves ...

<https://www.sciencedirect.com/science/article/pii/S1542356519309978>

Jul 01, 2020 · **Artificial** intelligence-based systems have been developed to analyze **endoscopic** images; they identify neoplasms with high accuracy and low interobserver variation. We performed a multi-center study to determine the diagnostic accuracy of EndoBRAIN, an **artificial** intelligence-based system that analyzes cell nuclei, crypt structure, and microvasculature in endoscopic images, in identification of colon