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述评 EDITORIAL

如何提高内镜下早期胃癌的诊断率

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How to improve endoscopic diagnosis of early gastric cancer?

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Abstract

Gastric cancer is the third leading cause of cancer death worldwide. The detection of early-stage gastric neoplastic lesions may improve survival. The gold standard for diagnosing gastric cancer remains endoscopy and histology of biopsy specimens. On one hand, we should administer the optimum preparation to patients, including an antiperistaltic agent. On the other hand, in order to detect the entire stomach, we need to follow a standardized protocol, and we should be aware of the diagnostic criteria for a suspicious lesion. Chromoendoscopy, narrow band imaging and magnifying endoscopy are promising image-enhanced endoscopic techniques for characterization. The criteria for diagnosing a cancerous lesion by narrow-band imaging with magnifying endoscopy are as follows: irregular microvascular pattern with a demarcation line or irregular microsurface pattern with a demarcation line. This paper gives a brief review of these methods.

Key Words: Endoscopy; Early gastric cancer; Diagnosis

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摘要

胃癌的死亡率位居全球恶性肿瘤死亡率的第3位, 早期胃癌(early gastric cancer, ECG)预后较好, 而进展期胃癌预后较差. 目前胃镜结合病理检查仍然是胃癌诊断的金标准. 胃镜检查前首先需做好准备工作, 包括减少胃蠕动药物的应用. 其次在胃镜检查时需规范操作, 避免盲区, 注意疑似病灶的识别. 染色内镜、窄带成像技术、放大内镜可增强

背景资料
胃癌的预后和诊断的时机密切相关, 早期胃癌(early gastric cancer, ECG)术后5年生存率超过了90%. 在我国, ECG占所有胃癌患者的比例为5%-10%, 然而在日本却高于50%.

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研发前沿
本文介绍了胃镜检查前的准备, 检查过程中的注意事项及相关新技术进展, 对消化、内镜室医生日常工作具有借鉴作用.

胃镜下ECG的特征. 窄带成像结合放大内镜下ECG诊断标准为: 肿瘤和非肿瘤间明显的分界线伴不规律的微血管结构或肿瘤和非肿瘤间明显的分界线伴不规律的微结构. 本文对这些方法作一简要综述.

关键词: 内镜; 早期胃癌; 诊断

核心提要: 目前胃镜结合病理检查仍然是胃癌诊断的金标准, 因此内镜下如何发现病灶并准确活检成为胃癌早期诊断的关键, 本文对内镜下如何发现早期胃癌(early gastric cancer, ECG)作一简要综述, 旨在提高内镜下ECG的诊断率.

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0 引言

胃癌发病率居全球肿瘤第5位, 在恶性肿瘤死亡病因中居第3位, 每年全球大概有952000新发病例及723000死亡病例[1]. 胃癌的预后与诊断的时机密切相关[2,3]. 进展期胃癌即使接受了以外科手术为主的综合治疗, 5年生存率仍低于30%[4]; 而早期胃癌(early gastric cancer, ECG)术后5年生存率超过了90%[5-9]. 因此胃癌的早期诊断成为决定患者预后的关键. 目前胃镜结合病理检查仍然是胃癌诊断的金标准, 因此内镜下如何发现病灶并准确活检成为内镜医生亟需解决的关于ECG的诊断率的关键问题. 在我国, ECG占所有胃癌患者的比例为5%-10%[10], 然而在日本却高于50%[11]. 本文对内镜下如何发现ECG作一简要综述, 旨在提高内镜诊断率.

1 胃镜检查前准备

1.1 祛黏液、祛泡剂 胃腔内的黏液和泡沫会影响观察, 不利于ECG的发现[12]. 为了提高EGC的发现率, 在胃镜检查前服用一些药物去除黏膜表面的黏液和泡沫显得非常重要. 目前常用的祛黏液剂为链蛋白酶, 链蛋白酶为一种蛋白裂解酶, 能裂解/溶解胃黏膜表面的黏液, 因链霉蛋白酶裂解黏液的最适合pH值介于6到8之间, 所以临床上常用碳酸氢钠作为缓冲液中和胃液的酸性环境[13]. 常用的祛泡剂为二甲硅油, 二甲硅油可改变黏液内气泡的表面张力, 并使之分解, 从而消除胃内泡沫[14]. 链蛋白酶和二甲硅油联合应用常可有效地祛除胃黏膜表面的黏液和泡沫[15-17]. 目前, 在日本链蛋白酶、二甲硅油和碳酸氢钠联合应用已作为胃镜检查前的标准用药[18].

1.2 减少胃蠕动药 为了发现胃黏膜微小病变, 内镜医师需要仔细观察整个胃腔黏膜, 而胃的蠕动常常影响观察. 检查前可肌肉/静脉注射山莨菪碱10 mg以减少胃蠕动. 如有抗胆碱能药物应用禁忌证, 可在胃镜检查前注射1 mg胰高血糖素可以减少胃蠕动[19].

2 规范操作避免盲区

2.1 适量注气 注气过少, 胃体黏膜皱襞未充分伸展, 常易漏诊胃体黏膜病变. 而注气过多, 胃窦黏膜过度伸展, 常使得一些浅表隆起病变不易发现. 通常在观察胃体时需注气以充分暴露黏膜, 而在观察胃窦时有时需适量吸气, 以免漏诊一些浅表隆起性病变.

2.2 冲洗黏膜表面的黏液及泡沫 胃黏膜表面的黏液及泡沫常使得一些胃黏膜微小病变不易发现, 而胃黏膜微小病变对ECG的发现具有重要的意义, 因此在胃镜检查时如黏膜表面有黏液需用清水冲净, 泡沫可用二甲硅油冲洗.

2.3 仔细观察避免盲区 经口插镜后, 内镜直视下从食管上端开始循腔进镜, 依次观察食管、贲门、胃体、胃窦、幽门、十二指肠球部及十二指肠降部, 倒镜时注意观察贲门、胃底、胃体及胃角, 退镜时依次从胃窦、胃角、胃体、胃底、贲门、食管退出. 依次全面观察、应用旋转镜身、屈曲镜端及倒转镜身等方法观察上消化道全部, 尤其是胃壁的大弯、小弯、前壁及后壁, 观察黏膜色泽、光滑度、蠕动及内腔的形状等. 观察胃底、胃体、胃窦时应尽可能多的从不同角度拍摄图片. 目前需拍摄多少张图片尚无公认的标准, 既往有日本学者建议拍摄40张图片[20], 但图片似乎太多, 内镜医师不易记住每个拍摄部位, 临床反而不太实用. Yao[19]建议至少拍摄22张图片, 即胃窦、胃体下部、胃体中部4个象限, 倒镜时胃底贲门4个象限、胃体中上部3个象限、胃角3个象限, 如发现病灶, 再增加拍摄图片.

3 注意疑似病灶

通常对于隆起/凹陷性病灶较易发现, 而对于胃炎样ECG则较难发现, 常见的主要标志为黏膜表面细微改变、颜色变化以及自发性出血. 但仍有部分ECG病灶与周边正常黏膜并无差别, 从而使得普通内镜下很难识别.

4 内镜辅助技术的应用

4.1 色素内镜 常用的为靛胭脂, 靛胭脂为对比染色剂, 沉积于黏膜皱襞, 不被吸收, 也不和黏膜结合, 与正常黏膜色泽形成鲜明对比, 并可显示出黏膜的细微凹凸改变及其立体结构, 靛胭脂喷洒后ECG常表现为明显的分界线及不规则的表面结构[21]. 醋酸喷洒可使蛋白质的三级结构发生可逆性改变, 从而使黏膜表面出现一过性白化, 醋酸联合靛胭脂染色后ECG主要表现为黏膜褪色[22-25]. Sakai等[26]对47例ECG病灶分别应用普通胃镜、单纯靛胭脂染色、单纯醋酸染色及醋酸联合靛胭脂染色后报道ECG的诊断率分别为17.0%、52.8%、41.5%及94.3%. 显示醋酸联合靛胭脂染色对ECG有较好的诊断率. Kono等[27]报道醋酸联合靛胭脂染色后ECG主要表现为黏膜发红. 醋酸联合靛胭脂染色后可使ECG的边界线显示得非常清楚, 从而有利于ECG内镜下完整切除[28-30].

4.2 窄带成像技术 窄带成像技术(narrow band imaging, NBI)是利用滤光器过滤掉内镜光源所发出的红蓝绿光波中的宽带光谱, 仅留下窄带光谱, 从而清楚地显示黏膜表层的毛细血管和黏膜表面腺管开口形态的一种内镜检查技术[31,32]. 由于不需要特殊染料, 仅需内镜按钮之间切换, 因而显得更方便. NBI模式下ECG主要表现为不规则的黏膜表面结构和不规则的血管[33]. 由于NBI采用了窄带光源, 而胃腔很大, 所以视野很暗, 一般认为单纯NBI在胃黏膜病变的诊断上并不实用[34,35].

4.3 NBI联合放大内镜 NBI联合放大内镜(magnifying narrow band imaging, MENBI)可使得黏膜表层的微血管和微结构显示的更为清楚. 目前常用的为VS(microvascular pattern, microsurface pattern)分型. VS分型对ECG的诊断非常有效[36-44], 并且可清楚地显示ECG的边界[45-49]. 胃黏膜上皮表面的微血管(V)分为三型: (1)规则的微血管结构: 微血管形态一致, 分布均匀, 排列整齐; (2)不规则的微血管结构: 微血管形态不一致, 分布不均匀, 排列紊乱; (3)微血管结构缺失: 微血管被上皮表面白色不透明物质掩盖. 微结构(S)分为三型: (1)规则的微结构: 微结构形态一致, 分布均匀, 排列整齐, 如果有表面白色不透明物质, 规律的白色不透明物质则是规律微结构的另一标志; (2)不规则的微结构: 微结构形态不一致, 分布不均, 排列紊乱, 如果有表面白色不透明物质, 则不规律的白色不透明物质为不规律微结构的另一标志, 表现为紊乱的不均匀分布的白色不透明物质; (3)微结构缺失: 微结构或白色不透明物质均缺失[50]. 满足以下一项即可诊断胃癌: (1)肿瘤和非肿瘤间明显的分界线伴不规律的微血管结构; (2)肿瘤和非肿瘤间明显的分界线伴不规律的微结构[19]. 有研究[50]报道97%的ECG符合这一诊断标准. 在胃镜检查时发现可疑病灶, 我们首先需判断分界线是否存在, 分界线对预测肿瘤的敏感性达到95%[42], 如不存在分界线, 基本可排除肿瘤. 确认分界线存在后, 则进一步观察MV及MS形态, 如存在不规则的微血管和/或不规则的微结构, 则可诊断肿瘤, 如不规则的微血管和不规则的微结构都不存在, 则基本可排除肿瘤.

相关报道
窄带成像结合放大内镜可清楚地显示黏膜表层的微血管和微结构, 从而有利于内镜下ECG的判断. 并且可清楚地显示肿瘤的边界, 从而有利于内镜下完整切除病灶.

5 结论

总之, 为提高内镜下ECG的诊断率, 我们必须做到以下几点: (1)胃镜检查前需做好准备工作, 包括祛黏液、祛泡剂及抑制胃蠕动药物的应用; (2)我们要有发现ECG的意识, 检查时做到无盲区, 注意疑似病灶的识别; (3)应用染色内镜、NBI及放大内镜等技术可提高ECG的发现率.

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创新盘点

本文介绍了我国目前ECG的诊断现状，胃镜在ECG诊断中的价值，胃镜检查前的准备及检查中的注意事项，重点介绍了窄带成像结合放大内镜在ECG诊断中的价值.

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名词解释

VS分型: 窄带成像放大内镜可清楚地显示黏膜表面的微血管(V)及微结构(S), 满足以下一项即可诊断胃癌: (1)肿瘤和非肿瘤间明显的分界线伴不规律的微血管结构; (2)肿瘤和非肿瘤间明显的分界线伴不规律的微结构.

同行评价
本文介绍了胃镜检查ECG相关方法要点、新技术的选择及操作者检查过程中易忽视的问题，对消化科医生和内镜室医生有一定参考价值.

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