• 胃癌 GASTRIC CANCER •

早期胃癌内镜下病灶范围估测与手术病理的比较

杨 文,吴云林,褚 晔,盛 红,何建华,熊锋宝,王 煜,程时丹

杨文,安徽省芜湖市第二人民医院消化内科 安徽省芜湖市 241000 吴云林,褚晔,程时丹,上海第二医科大学附属瑞金医院消化科 上海市 200025

盛红,何建华,熊锋宝,王煜,上海第二医科大学附属瑞金医院消化科 上海市 200025

杨文,男,1963-05-05生,安徽省合肥市人,汉族. 皖南医学院本科毕业,副主任医师. 现在安徽省芜湖市第二人民医院消化内科工作.

项目负责人:吴云林,200025,上海市瑞金二路197号,上海第二医科大学附属瑞金医院消化科. steiger@sina.com

电话:021 - 64370045 传真:021 - 34121398

收稿日期:2002-04-15 接受日期:2002-06-26

Difference of tumor size between endoscopic estimation and postoperative pathological measurement in early gastric carcinoma

Wen Yang, Yun-Ling Wu, Ye Chu, Hong Sheng, Jian-Hua He, Feng-Bao Xiong, Yu Wang, Shi-Dan Cheng

Wen Yang, Department of Gastroenterology, Ruijin Hospital, Shanghai Second Medical University, now in Department of Gastroenterology of Wuhu No.2 Peoples Hospital, Wuhu 241000, Anhui Province, China Yun-Ling Wu, Ye Chu, Shi-Dan Cheng, Department of Gastroenterology, Ruijin Hospital, Shanghai Second Medical University, Shanghai 200025, China Hong Sheng, Jian-Hua He, Feng-Bao Xiong, Yu Wang, Department of Gastroenterology, Ruijin Hospital, Shanghai Second Medical University, Shanghai 200025, China

Correspondence to Prof. Yun-Lin Wu, Department of Gastroenterology, Ruijin Hospital, Shanghai Second Medical University, Shanghai 200025, China. steiger@sina.com

Receiverd:2002-04-15 Accepted:2002-06-26

Abstract

AIM:To study the difference of tumor size between endoscopic estimation and postoperative patholoigical measurement in early stage of gastric carcinoma.

METHODS: The size of lesion was estimated by biopsy forceps at endoscopy and by postoperative pathological measurement in 118 patients with early gastric cancer. The correlation between clinicopathological features and measuring errors were analyzed.

RESULTS:Through two different ways of measurement, there was coincidence in 26 of 118 cases (22.0 %), and unconformity in 92 of 118 cases (77.9 %). The size estimated by biopsy forceps at endoscopy was smaller than by postoperative pathological measurement. In histological study, the measuring error rate was higher in the lowly-differentiated type than that in the highly-differentiated type.

CONCLUSION: There were significant measuring errors in tumor size between endoscopic estimation and pathological measurement in depressed and lowly-differentiated type.

The tumor size was smaller in endoscopic estimation than that in the postoperative pathological measurement. This measuring error may be associated with the biological feature of gastric cancer, except the experiences of endoscopists.

Yang W, Wu YL, Chu Y, Sheng H, He JH, Xiong FB, Wang Y, Cheng SD. Difference of tumor size between endoscopic estimation and postoperative pathological measurement in early gastric carcinoma. Shijie Huaren Xiaohua Zazhi 2003;11(1):51-53

摘要

目的:早期胃癌病灶范围的内镜下活检钳估测与术后病理测量结果差异的研究.

方法:对118例早期胃癌患者的病灶范围进行胃镜下及术后病理测量,对临床病理特征与测量误差的关系进行相关分析.

结果:早期胃癌病灶内镜下活检钳测量与手术后病理测量相符的 26 例(22.0 %),有误差的 92 例(77.9 %),其中活检钳测量小于手术后病理测量的 72 例(占 61.0 %).大体形态分型中,凹陷型比隆起型、平坦型测量误差率高.组织类型中,低分化型比分化型胃癌测量误差率高.

结论:凹陷型和低分化型早期胃癌,内镜下活检钳法测量病灶范围与术后病理测量相比常有较大的误差,一般小于病理测量,除内镜操作者的经验外,与癌灶的生物学特性或许有一定关联.

杨文,吴云林,褚晔,盛红,何建华,熊锋宝,王煜,程时丹. 早期胃癌内镜下病灶范围估测与手术病理的比较. 世界华人消化杂志 2003;11(1):51-53 http://www.wjgnet.com/1009-3079/11/51.htm

0 引言

胃癌是我国最常见的恶性肿瘤,其发生率与死亡率均居各种恶性肿瘤的首位[1-8].胃癌的发生发展是多因素、多阶段、多基因变异的病理过程[9-12].进展期胃癌患者的5a生存率仅为20-40%,而早期胃癌患者的5a生存期可达90%以上,因此,国内外临床工作者均致力于提高早期胃癌的检出率.目前,胃镜诊断是检出早期胃癌的主要手段,正确的病灶范围估测对早期胃癌的治疗方法的选择(内镜下切除还是外科手术治疗)至关重要.胃镜下对病变范围的估计通常用活检钳测量法.本文报道内镜直视下肉眼观察联用活检钳测量法估测早期胃癌病变范围与外科手术切除后病理检测的范围作比较研究,分析发生误差的原因.

1 材料和方法

1.1 材料 1997-01/2002-02 胃镜检查发现并经活检钳测量法估测病灶范围,后经外科手术切除标本病理证实为早期胃癌患者 118 例.男 79 例,女 39 例.年龄 28-87 岁 (平均 56 ± 1.2)岁.

1.2 方法 胃镜检查中发现早期胃癌病灶后应用张开的活检钳测量病灶直径,然后多块多方向钳取活组织行病理学检查.病理报告证实胃癌后转外科手术切除.切除标本处理按胃癌病理学检查规范,并测量病灶直径及范围,所测范围与内镜测量结果作比较.内镜估测与切除标本病理检测范围最大直径误差<1 cm 为++,1-2 cm 为++,>2 cm 为+++.

2 结果

2.1 早期胃癌的大体分型与病理分类 本组 118 例早期 胃癌患者形态学上隆起型为主的 21 例,其中 型 3 例, a型 12 例, a+ c型 6 例;属平坦型 6 例;凹陷型为主的 91 例,其中 c型 69 例, c+ 型 7 例, 型 15 例.将 52 例高分化和中分化的乳头状癌、管状腺癌、黏液癌等归为分化型胃癌,66 例分化差的 硬癌、印戒细胞癌、黏液癌等归为低分化胃癌(表 1).

表 1 118 例早期胃癌形态与组织分型

组织类型	n	隆起型	平坦型	凹陷型
分化型胃癌	52	17	2	33
低分化型胃癌	66	4	4	58

表 2 早期胃癌 92 例病灶直径判别误差情况比较

病理情况	n	误差+	误差 ++	误差 +++
胃癌形态				
型	3	1		
a 型	12	2	2	
a+ c型	6	2	3	
b型	6	2	2	1
c 型	69	14	13	29
c+ 型	7	1	4	2
型	15	1	8	5
胃癌组织学				
分化型	40	20	16	4
低分化型	52	3	16	33
胃癌部位				
贲门部	3	2	1	
胃体部	12	5	5	2
胃角部	38	5	18	15
胃窦部	39	11	8	20
胃癌浸润深度				
黏膜层	70	17	22	31
黏膜下层	22	6	10	6

2.2早期胃癌内镜估测与手术病理测量比较 118例患者中,内镜测量与手术后病理测量相符的 26 例(22.0 %),与手术后病理测量有误差的 92 例(77.9 %).活检钳测量直径小于手术后病理测量的 72 例(61.0 %),大于术后病理测量的 20 例(16.9 %).误差范围为 0.2-6.5 cm,平均误差 1.689±1.424 cm.其中误差<1 cm 的 23 例 (25.0 %),1-2 cm 的 32 例(34.7 %),>2 cm 的 37 例(40.2 %,表 2).

3 讨论

胃镜直视下活检钳法测量病灶大小是一种常用的估测方法.本研究中与手术后病理测量比较相符合的 26 例 (22.0 %),而与术后病理测量有误差的92例(77.9 %),其中72例(61.0 %)活检钳法测量直径小于手术后病理测量.本组 118 例中早期胃癌凹陷型病变为 91 例(77.1 %),溃疡凹陷的 c, c+ 以及 型的病灶其测量误差高于隆起 型和平坦 b型早期胃癌,误差在 1-2 cm 的占 25 例(27.2 %),<2 cm 的病例占 36 例(39.1 %).

曾报道早期胃癌隆起性病变大多为高分化型,而凹陷型则以低分化型为多.溃疡型癌通常由未分化腺癌和印戒细胞癌组成,而隆起型主要由乳头状和管状腺癌组成.而对本组低分化型胃癌与分化型胃癌两组的测量误差进行比较,低分化型的误差率高,且大都误差在2cm以上.

胃癌间质血管的病理改变是肿瘤发生、发展的重要因素[13,21].Yao et al [14]报道大多数分化型胃癌黏膜与周围组织相比血管分布相同或较多,而大多数低分化型胃癌黏膜与周围组织相比血管分布较少.由于血管分布无规律性,这就使得低分化型胃癌细胞在生长时需依靠其周围黏膜和黏膜下血供向深部及四周浸润生长.癌细胞生长的这种无序性[15-19]及深部浸润性[20,22,23],使得凹陷型病变在内镜肉眼下观察及采用活检钳法对范围进行估测时易于产生误差.

本结果表明, 内镜直视下仅凭经验观察早期胃癌病灶的边缘和范围, 然后应用活检钳的方法测量病灶的直径显然是不够的.应努力借助于高清晰度的放大内镜, 以及使用美兰或靛胭脂等色素剂[24],以勾勒出病灶清晰的边缘,可观察到常规内镜检查不能发现的细颗粒、小结节、小糜烂及轻度不平整等,并能在局部胃蠕动波中了解到黏膜柔软性及变形性,从而较全面及正确地估测早期胃癌的直径与范围.

此外,应用超声内镜^[25,26]或近红外线电子内镜^[27]检查亦有助于正确估测早期胃癌范围,并能了解浸润深度和有无局部淋巴结转移.最近使用的内镜固有荧光光活检技术^[28-30]可根据组织的固有荧光光谱特征自动识别和诊断,能立即提示被测组织是正常、良性病变还是早期胃癌组织,检测结果阳性符合率高,有助于早期胃癌病变范围的正确评估,对此值得进一步深入研究.

4 参考文献

- 1 Zhang FX, Deng ZY, Zhang XY, Kang SC, Wang Y, Yu XL, Wang H, Bian XH. Telomeric length associated with prognosis in human primary and metastatic gastric cancer. Shijie Huaren Xiaohua Zazhi 2000;8:153-155
- 2 Cui DX, Yan XJ, Zhang L, Zhao JR, Jiang M, Guo YH, Zhang LX, Bai XP, Su CZ. Screening and its clinical significance of 6 fragments of highly expressing genes in gastric cancer and precancerous mucosa. Shijie Huaren Xiaohua Zazhi 1999;7:770-772
- Wang CD, Chen YL, Wu T, Liu YR. Association between low expression of somatostatin receptor gene and lymphoid metastasis in patients with gastric cancer. Shijie Huaren Xiaohua Zazhi 1999; 7: 864-866
- Wang Q, Jin PH, Lin GW, Xu SR. Cost-effectiveness of population-based *Helicobacter pylori* screening to prevent gastric cancer. Shijie Huaren Xiaohua Zazhi 2000;8:262-265
- 5 Chen SD, Wu YL, Zhang YP, Qiao MM, Guo QS. Abnormal drug accumulation in multidrug resistant gastric carcinoma cells. Shijie Huaren Xiaohua Zazhi 2001;9:131-134
- 6 Gao MX, Zhang NZ, Ji CX. Estrogen receptor and PCNA in gastric carcinomas. Shijie Huaren Xiaohua Zazhi 2000;8:1117-1120
- 7 Gao P, Jiang XW, Yuan WJ. Effects of gastrin and gastrin receptor antagonist proglumide on gastric cancer line. Shijie Huaren Xiaohua Zazhi 1999;7: 22-24
- Wu HP, Wu KC, Li L, Yao LP, Lan M, Wang X, Fan DM. Cloning of human cyclooxygenase-2 (COX-2) encoding gene and study of gastric cancer cell transfected with its antisense vector. Shijie Huaren Xiaohua Zazhi 2000; 8:1211-1217
- 9 Zhou LY, Chen CY, Liang P, Chen LY. ICAM-1 and VCAM-1 expressions on benign gastric mucosa and gastric adenocarcinoma associated with *Helicobacter pylori* infection. *Shijie Huaren Xiaohua Zazhi* 2000;8:279-281
- 10 Guo CQ, Wang YP, Liou GY, Ma SW, Ding GY, Li JC. Study on Helicobacter pylori infection and p53, c-erbB-2 gene expression in carcinogenesis of gastric mucosa. Shijie Huaren Xiaohua Zazhi 1999:7: 313-315
- Wang DX, Fang DC, Liu WW. Study on alteration of multiple genes in intestinal metaplasia, atypical hyperplasia and gastric cancer. Shijie Huaren Xiaohua Zazhi 2000;8:855-859
- 12 Wang RQ, Fang DC, Liu WW. MUC2 gene expression in gastric cancer and preneoplastic lesion tissues. Shijie Huaren Xiaohua Zazhi 2000;8:285-288
- 13 Gao GL, Yang Y, Yang SF, Ren CW. Relationship between proliferation of vascular andothelial cells and gastric cancer. Shijie Huaren Xiaohua Zazhi 2000; 8:282-284
- 14 Yao K, Oishi T, Matsui T, Yao T, Iwashita A. Novel magnified endoscopic findings of microvascular architecture in intramucosal gastric cancer. Gastrointest Endosc 2002;56:279-284
- Liang WJ, Ma YJ, Zhang WD, Chen YP. Relationship between classification of spleen syndromes of patients with chronic gastric diseases and gastric carcinoma and cyclin E epression. Shijie Huaren Xiaohua Zazhi 2000; 8:513-515
- 16 Wang B, Shi LC, Zhang WB, Xiao CM, Wu JF, Dong YM. Ex-

- pression and significance of p16 gene in gastric cancer and its precancerous lesions. *Shijie Huaren Xiaohua Zazhi* 2001;9:39-42
- Liu HF, Liu WW, Fang DC, Men RF, Wang ZH. Apoptosis and its relationship with Fas ligand expression in gastric carcinoma and its precancerous lesion. Shijie Huaren Xiaohua Zazhi 1999;7: 561-563
- 18 Li JQ, Wan YL, Chai WY. Biological significance of cyclin E expression in early gastric cancer. Shijie Huaren Xiaohua Zazhi 1999; 7:31-33
- Allgayer H, Babic R, Gruetzner KU, Tarabichi A, Schildberg FW, Heiss MM. c-erbB-2 is of independent prognostic relevance in gastric cancer and is associated with the expression of tumorassociated protease systems. J Clin Oncol 2000;18:2201-2209
- 20 Wang YK, Ma NX, Lou HL, Li Y, Wang L, Pan H, Zhang ZP. Relationship between P53, nm23 protein expression and lymphatic hyperplasia in gastric cancer. Shijie Huaren Xiaohua Zazhi 1999; 7: 34-36
- 21 Zhang YM, Deng CS, Zhu YQ, Mao YR, Zhan K, Yang YP. Correlation between expression of hypoxia-inducible factor-1α mRNA and angiogenesis in gastric adenocarcinoma. Shijie Huaren Xiaohua Zazhi 2002;10:633-637
- 22 Ninomiya Y, Yanagisawa A, Kato Y, Tomimatsu H. Unrecognizable intramucosal spread of diffuse-type mucosal gastric carcinomas of less than 20 mm in size. Endoscopy 2000;32:604-608
- 23 Namieno T, Koito K, Hiigashi T, Takahashi M, Shimanura T, Yamashita K, Kondo Y. Endoscopic prediction of tumor depth of gastric carcinoma for assessing the indication of its limited resection. Oncol Rep. 2000;7:57-61
- 24 Hiki Y. Endoscopic diagnosis of mucosal cancer. Semin Surg Oncol 1999;17:91-95
- Yanai H, Noguchi T, Mizumachi S, Tokiyama H, Nakamura H, Tada M, Okita K. A blind comparison of the effectiveness of endoscopic ultrasonography and endoscopy in staging early gastric cancer. Gut 1999;44: 361-365
- 26 Ohashi S, Segawa K, Okamura S, Mitake M, Urano H, Shimodaira M, Takeda T, Kanamori S, Naito T, Takeda K, Itoh B, Goto H, Niwa Y, Hayakawa T.The utility of endoscopic ultrasonography and endoscopy in the endoscopic mucosal resection of early gastric cancer. Gut 1999;45:599-604
- 27 Iseki K, Tatsuta M, Iishi H, Sakai N, Yano H, Ishiguro S. Effectiveness of the near-infrared electronic endoscope for diagnosis of the depth of involvement of gastric cancers. *Gastrointest Endosc* 2000:52:755-762.
- 28 Bhuncher E, Hatakawa H, Sakai Y, Shibata T. Fluorescein electronic endoscopy: a novel method for detection of early stage gastric cancer not evident to routine endoscoopy. *Gastrointest Endosc* 2002;55:562-571
- 29 Kobayashi M, Tajiri H, Seike E, Shitaya M, Tounou S, Mine M, Oba K. Detection of early gastric cancer by a real-time autofluorescence imaging system. Cancer Lett 2001;165:155-159
- Namihisa A, Miwa H, Watanabe H, Kobayashi O, Ogihara T, Sato N. A new technique: light-induced flrorescence endoscopy in combination with pharmacoendoscopy. *Gastrointest Endosc* 2001;53:343-348