

A Case Report of the Round Hepatic Ligament Being as Contents of Linea Alba Associated with Gastric Cancer

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Abstract: A 70 year-old woman with chief complaint of an epigastric abdominal wall for more than 60 years, and dull pain in epigastria for 1 month. The general condition of this patient was good on physical examination, and patient was found with pale face and conjunctiva and negative yellow sclera. An abdominal soft mass sized in 6 cm × 4 cm, and was unable to push back abdominal cavity. Ultrasound showed that the echo of subcutaneous fascia was interrupted with a 9 mm long defect, and a mass about 53 mm × 20 mm × 39 mm with slightly strong echo was found superiorly, and bowel and omentum-like tissues seemed to connect with intra-abdominal cavity. Moreover, abdominal CT scan demonstrated that linea alba hernia. An irregular ulcer sized 4 cm × 3.5 cm was found by gastroscopy, and poorly-differentiated adenocarcinoma proven by biopsy. Furthermore, laboratory examination showed that hemoglobin was 73 g/L, and carcinoembryonic antigen (CEA) 3.0 ug/L. A exploratory laparotomy was performed under epidural anesthesia, a soft, yellowish, sized 3 cm × 4 cm × 4 cm tumor was found in linea alba, which connected with round hepatic ligament; the gastric cancer located at gastric antrum, about 5 cm × 4 cm, with serosal invasion and Borrmann type 3. Therefore, a radical distal gastrectomy and linea alba hernia repair were performed. The recovered smoothly and discharged healthy.

Keywords: Linea Alba; Round Hepatic Ligament; Gastric Cancer

腹白线疝内容物为肝圆韧带并发胃癌一例

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摘要: 女性, 70岁, 主诉上腹壁包块60余年, 上腹部隐痛1月余。查体: 一般情况尚可, 贫血貌, 结膜苍白(++), 巩膜黄染(-)。上腹部正中可及一6 cm × 4 cm一包块, 质软, 不能回纳。腹部B超检查示: 上腹部腹壁皮下深筋膜回声中断, 有一个缺口约9 mm, 其浅方可见一个53 mm × 20 mm × 39 mm偏强回声团块, 内见蠕动的肠管及网膜样组织, 通过此缺口与腹腔相通, 提示腹白线疝。腹部CT扫描提示: 上腹前壁中线处皮下脂肪性团片影, 考虑腹白线疝可能。胃镜检查: 胃窦部见一个不规则隆起, 大小约4 cm × 3.5 cm, 表面溃烂, 病理示: 低分化腺癌。实验室检查: 血红蛋白(Hb)73 g/L, 癌胚抗原(CEA)3.0 ug/L。在硬膜外麻醉下行剖腹探查: 术中见腹白线处有一个3 cm × 4 cm × 4 cm肿块, 边界清, 淡黄色, 质软, 与肝圆韧带顺序相连; 肿瘤位于胃窦部小弯侧后壁, Borrmann3型, 约5 cm × 4 cm大小, 穿透浆膜面, 故行“根治性胃远端大部切除(D2⁺), 腹白线疝修补术”, 术后恢复顺利, 痊愈出院。

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关键词：腹白线疝；肝圆韧带；胃癌

1. 引言

女性，70岁，住院号606369，大约60年前患者无意中发上腹壁包块，当时约指头大小，并缓慢增长，无腹痛等其他不适；近1月来出现上腹部隐痛，不向腰背部放射，无明显恶心呕吐及黑便。查体：一般情况尚可，贫血貌，结膜苍白(++)，巩膜黄染(-)。上腹部正中可及一个大小约6 cm × 4 cm包块，质软，不能回纳，上腹部轻压痛，肝脾肋下未及，肠鸣音正常。腹部B超检查：肝脏无转移性结节，腹腔及腹膜后无肿大淋巴结，上腹部腹壁皮下深筋膜回声中断，有一个缺口约9 mm，其浅方可见一个53 mm × 20 mm × 39 mm偏强回声团块，内见蠕动的肠管及网膜样组织，通过此缺口与腹腔相通，提示腹白线疝(图1A, B)。腹部CT扫描提示：上腹前壁中线处皮下脂性团片影，考虑腹白线疝可能(图1C)，同时腹膜后无明显肿大淋巴结，肝脏无转移结节。胃镜检查：胃窦部见一个巨大不规则隆起，表面溃烂，质脆，提示胃

窦癌。病理示：低分化腺癌。实验室检查：白细胞(WBC) 4.8×10^9 g/L (4.0~10.0 × 10^9 g/L)，红细胞(RBC) 2.6×10^{12} g/L (3.5~5.0 × 10^{12} g/L)，血红蛋白(Hb) 73 g/L (110~150 g/L)，红细胞压积(HCT) 0.223(0.350~0.450)；总蛋白 33.9 g/L (35.0~52.0 g/L)；白球蛋白比值 0.7(1.5~2.5)；葡萄糖 5.4 mmol/L (3.9~6.1 mmol/L)；癌胚抗原(CEA)3.0 ug/L(0.0~5.0 ug/L)。

综合上述结果诊断为进展期胃癌伴继发性贫血，腹白线疝。入院后给予营养支持治疗，纠正贫血，积极手术准备，于硬膜外麻醉下行剖腹探查：术中见腹白线处有一个3 cm × 4 cm × 4 cm肿块，边界清，淡黄色，质软，与肝圆韧带顺序相连(图1D)，腹腔内无腹水，肝脏无转移性结节，腹膜无播种性结节，肿瘤位于胃窦部小弯侧后壁，Borromann3型，约5 cm × 4 cm大小，穿透浆膜面，术中诊断为进展期胃癌，腹白线疝，手术行“根治性胃远端大部切除(D2⁺)，Billorth I式吻合，腹白线疝修补术”，手术顺利，术后恢复顺利，痊愈出院。

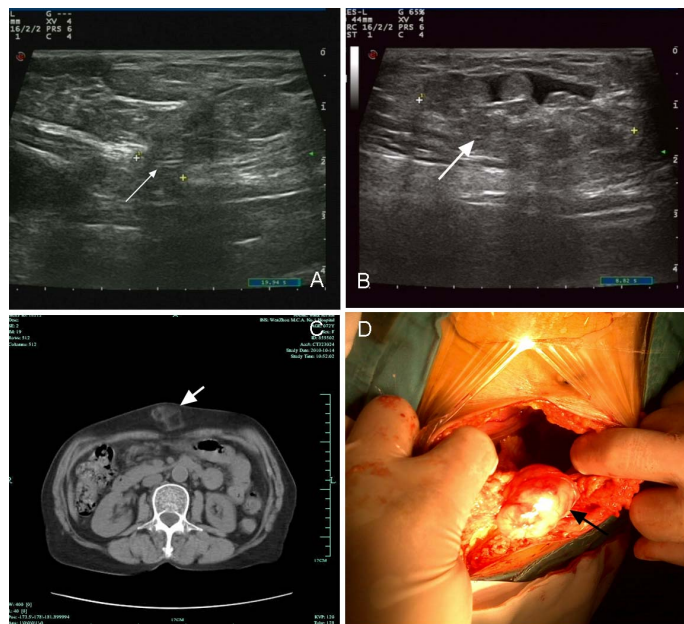


Figure 1. Ultrasound indicated that interrupted echo of deep fascia was found at epigastria, approximately 9 mm defect, and an slightly strong echo mass about 53 mm × 20 mm × 39 mm in size located at superior layers, and peristaltic bowel and omentum-like tissue in this space, connected with intra-abdominal cavity (A, B). CT scanning demonstrated fat-like tissues were found in abdominal wall of epigastric region, and lineal alba hernia was the first consideration (C). A clear, yellowish and soft lump about 3 cm × 4 cm × 4 cm was found in lineal alba, which it connected with hepatic round ligament (D)

图1. 超声检查示：上腹部腹壁皮下深筋膜回声中断，有一个约9 mm缺口，其浅方可见一个53 mm × 20 mm × 39 mm偏强回声团块，内见蠕动的肠管及网膜样组织，通过此缺口与腹腔相通，提示腹白线疝(A, B)。CT扫描提示：上腹前壁中线处皮下脂性团片影，考虑腹白线疝可能(C)；术中见腹白线处有一个3 cm × 4 cm × 4 cm肿块，边界清，淡黄色，质软，与肝圆韧带顺序相连(D)

2. 讨论

白线疝属临床上少见腹内疝，它可发生于腹壁正中(即腹白线)的不同部位，但绝大多数位于脐上腹白线^[1]。腹白线的腱纤维均为斜行交叉，这一结构可使白线作出形态和大小改变以适应躯体活动或腹壁活动的变化。但当腹内压力增高(如慢性咳嗽、慢性便秘、排尿困难、腹水、妊娠及举重等)，同时腹壁强度降低(如腹白线发育不全、手术切口愈合不良、老年、久病及肥胖所致肌萎缩等)时，就有可能撕裂交叉的腱纤维，从而逐渐形成白线疝^[1-3]。如果仅有膜外脂肪组织从此间隙中疝出，此时疝内容物为脂肪组织，无疝囊(无疝囊型)。随着病情进一步发展，突出的腹膜外脂肪可把腹膜向外牵出形成疝囊(有疝囊型)，进而腹内组织(通常是大网膜，少数可是肝圆韧带、肠管(Richter疝)、扩张的腹腔内血管和肝脏等)通过疝颈进入疝囊^[1,3,4]。本例患者从儿童时期即发现前腹壁肿块，考虑与腹白线先天性薄弱有关。

作者查阅 1989 年以后中文文献及 1977 年以后 Medline 文献后仅发现 2 例疝内容物为肝圆韧带的腹白线疝报道，国内外各 1 例^[2,3]。由于本病早期腹块较小，仅表现为上消化道症状如上腹钝痛、烧灼痛、或痉挛性疼痛、腹胀、消化不良、恶心和呕吐等，其典型病例是饱餐后站立时加重或在用力时上腹痛。故常被漏诊或误诊为消化道疾病(如胆道疾病、溃疡病、慢性胰腺炎等)。因此，凡是有上述症状的患者，应仔细检查有无微小压痛的肿块或白线上的缺损。倘若腹白线肿块可以复位，应考虑到本病。另外，白线疝需要与生长缓慢的脂肪瘤、纤维瘤、神经纤维瘤及低度恶性的硬纤维瘤等前腹壁肿瘤相鉴别^[1,2]。不过，像本

例同时并发胃癌的腹白线疝病例，尚需与腹腔内癌瘤的脐部转移(Mary Joseph sister 结节)和术后切口肿瘤种植转移相鉴别^[5]。

多数认为凡临床症状明显或直径大于 0.5 cm 的白线疝，均应早期手术治疗，避免病情加重。手术多采用纵形切口，切开皮下组织后仔细分离脱出的脂肪组织，充分显露白线，然后处理疝囊：1) 无疝囊型：将突出的腹膜前脂肪稍向外牵拉后于根部结扎切断，使脂肪回缩至白线后方，而后修补白线缺损；2) 有疝囊型：切开疝囊、还纳内容物，疝囊颈部高位结扎、切除疝囊，再修补白线缺损；3) 如果白线间隙(疝环)较大，应采用重叠缝合腹白线或应用各种补片进行无张力修补，以加强腹壁、防止复发；4) 也可采用腹腔镜下疝修补^[2-6]。本例因为腹白线疝较小，故仅切除疝出腹壁的多余肝圆韧带，直接将两侧的腹直肌前后鞘间断缝合修补，术后痊愈出院。

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