

· 论著 ·

腹膜高分化乳头状间皮瘤一例并文献回顾*

王粤培 郑 炜 梁楚琳 黄国庆 刘序友*

暨南大学附属广州红十字会医院(广东 广州 510220)

【摘要】目的 探讨高分化乳头状间皮瘤(well-differentiated papillary mesothelioma, WDPM)的主要临床症状、诊断和治疗。方法 分析1例腹膜高分化乳头状间皮瘤患者资料并复习相关文献。结果 患者主要表现为肠梗阻。为解除肠梗阻行腹腔镜探查术，术中未见明显梗阻点，小肠系膜表面可见多个小结节，结节在镜下所见：由衬覆单层立方间皮细胞的乳头组成，乳头核心见纤维血管，间皮细胞形态一致，核圆形，可见小核仁，核分裂罕见。免疫组化结果：CR(+)、D2-40(+)、CK5/6(弱+)、CK7(+)、CK19(+)、Ki-67(约1%+)、P53(约50%+)、EMA(-)、CEA(-)。初步诊断为腹膜高分化乳头状间皮瘤，予患者保守治疗并随访。结论 WDPM是一种罕见的间皮来源的具有低度恶性潜能的肿瘤，无特异性症状。诊断主要依赖于术中探查、病理活组织检查和免疫组化分析。WDPM的标准化治疗尚无共识。

【关键词】高分化乳头状间皮瘤；腹膜；临床特征；病例报告

【中图分类号】R735.5

【文献标识码】A

【基金项目】国家自然科学基金资助项目(81972211)

DOI:10.3969/j.issn.1009-3257.2025.1.002

Well-differentiated Papillary Mesothelioma of the Peritoneum: A Case Report and Literature Review*

WANG Yue-pei, ZHENG Wei, LIANG Chu-lin, HUANG Guo-qing, LIU Xu-you*.

Guangzhou Red Cross Hospital of Jinan University, Guangzhou 510220, Guangdong Province, China

Abstract: Objective To comprehend the primary clinical symptoms, prognosis, and therapy of well-differentiated papillary mesothelioma (WDPM). **Methods** We reviewed the pertinent research and the patient's peritoneal hyperdifferentiated papillary mesothelioma data. **Results** The patient mainly presented with intestinal obstruction. On the mesenteric surface of the small intestine, several tiny nodules can be recognized. Inside the nodules, which were observed under a microscope, were papillae bordered with a single layer of rectangular mesothelial cells, each having a fibrovascular core and a consistent mesothelial cell shape, including round nuclei and short nucleoli. CR (+), D2-40 (+), CK5/6 (weak +), CK7 (+), CK19 (+), Ki-67 (1% +), P53 (50% +), EMA (-), and CEA (-) were the immunohistochemical findings. The patient had conservative treatment and was monitored after receiving a preliminary diagnosis of peritoneal highly differentiated papillary mesothelioma. **Conclusion** The WDPM is an uncommon mesothelial tumor with a low-grade malignant potential and no distinguishing symptoms. There is no agreement on the conventional treatment of WDPM, and the diagnosis primarily relies on operative exploration, pathological biopsies, and immunohistochemical analysis.

Keyword: Well-differentiated Papillary Mesothelioma; Peritoneum; Clinical Features; Case Report

1 临床资料

患者男，63岁，因“反复上腹部胀痛7年，再发伴加重12小时”于2022年4月18日来本院就诊。患者7年前无明显诱因下出现上腹部胀痛，持续1-2小时，肛门排便排气后可缓解，此后症状反复发作，性质同前。12小时前患者进食晚饭后再次出现上腹部胀痛，呈阵发性隐痛，伴恶心，呕吐2次胃内容物，伴肛门少量排气，排气后腹痛可缓解。既往行胃大部切除术+胃空肠吻合术；3月行肠息肉切除术，病理示横结肠管状腺瘤。入院查体：腹部稍膨隆，腹壁柔软，上腹部轻压痛，无反跳痛，叩诊为鼓音，移动性浊音阴性，肠鸣音活跃，7次/分，听诊无金属音。辅助检查：血常规：WBC $13.38 \times 10^9/L$ ，RBC $5.25 \times 10^{12}/L$ ，Hb 151g/L，PLT $263 \times 10^9/L$ ，中性粒细胞细胞数 $11.53 \times 10^9/L$ 。腹部CT平扫：小肠肠梗阻改变，梗阻点位于左上中腹空肠远段，考虑粘连性肠梗阻，并腹腔少量积液(见图1)。诊治经过：结合患者病史及影像资

料考虑患者为急性不完全性肠梗阻可能性大，且多次反复发作，为解除肠梗阻行腹腔镜探查术。术中见少量腹水，小肠未见明显梗阻点，小肠系膜表面可见多个结节，直径0.2-0.5cm，质软，切除小肠系膜结节和腹膜送检。肠系膜结节镜下所见：由衬覆单层立方间皮细胞的乳头组成，乳头轴心见纤维血管，间皮细胞形态一致，核圆形，可见小核仁，核分裂罕见(见图2)；免疫组化染色结果：CR(+)、D2-40(+)、CK5/6(弱+)、CK7(+)、CK19(+)、Ki-67(约1%+)、P53(约50%+)、EMA(-)、CEA(-)；病理诊断：考虑为高分化乳头状间皮瘤。腹膜活检：局部可见高分化乳头状间皮瘤成分。术后予禁食补液、胃肠减压、抑酸护胃、抗炎等治疗，行腹部增强CT提示肠管未见梗阻征象，小肠系膜内可见多发小结节影，增强扫描呈均匀强化。术后患者病情稳定，建议内科保守治疗并随访。1年后随访病人情况，患者诉无再发肠梗阻，现偶有进食后轻微腹胀，较既往减轻，持续半小时可缓解。

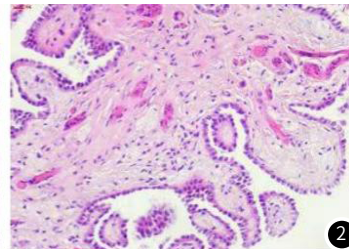


图1 患者2022年4月18日腹部CT检查结果。图2 患者2022年4月20日手术标本病理(苏木-精伊红染色×400)。

【第一作者】王粤培，女，专业型硕士研究生，主要研究方向：代谢相关脂肪性肝病。E-mail: wyp221226@163.com

【通讯作者】刘序友，男，主任医师，主要研究方向：肝纤维化。Email: liuxy717@163.com

2 讨论

高分化乳头状间皮瘤(well-differentiated papillary mesothelioma, WDPM)是一种非常罕见独特的间皮肿瘤,国内外相关报道较少。该病大多数是在剖腹手术或者因其他疾病行腹腔镜手术时偶然发现的,病变最常见于腹膜腔、心包或鞘膜,大多为良性或惰性,育龄期女性更常见^[1]。本文报道以肠梗阻为首发表现的腹膜高分化乳头状间皮瘤老年男性患者1例,旨在提高广大临床医生对该病的认识。

WDPM病因并不明确,与石棉接触相关尚未确定,可能与既往腹部手术、创伤、吸烟饮酒史以及家族史有关^[2]。大多数患者无症状,临床表现多样缺乏特异性,极少数表现为腹痛、腹水、腹胀、肿块、体重减轻等,还可伴恶心、呕吐、不完全性肠梗阻等^[3,4]。目前诊断主要依赖于术中探查、病理活检和免疫组化分析^[5]。影像学表现无特异性,可表现为大量腹水、网膜结块和腹膜结节或斑块样腹膜增厚、结节性钙化等,CT对病变发现优于超声^[6]。术中探查一般表现为白色或灰白色的单个或多个结节,可伴纤维粘连。若肿瘤分布弥漫,病理活检时不易观察到全部肿瘤,易引起漏诊^[7]。WDPM组织学特征为伴有纤维血管核心的发育良好的乳头状结构,也可表现为小管球状或球状结构。乳头状结构由单层立方体或扁平的间皮细胞覆盖形成,间皮细胞几乎无核异型和有丝分裂^[8-9]。最常用的免疫组化检测包括calretinin、CK5/6、WT-1、vimentin、D2-40、EMA和HBME-1等,多认为至少2个以上标志物阳性才可诊断腹膜间皮瘤^[4]。

WDPM的主要鉴别诊断有反应性间皮增生,恶性间皮瘤和具有乳头状形态的转移癌^[10]。区别良恶性间皮瘤意义重大,恶性间皮瘤病理特征为高级别的核特征、存在坏死和有较高增殖指数的有丝分裂^[11]。GLUT-1、CD146、p53和Ki-67标记指数 $\geq 1\%$ 可作为WDPM免疫组化标志物与恶性间皮瘤相鉴别, P16、BAP1和L1CAM表达亦有助于诊断WDPM^[12-13]。已发现有WDPM患者多年后转变为恶性间皮瘤^[14]。而一些学者在研究分子发病机制时,均未在WDPM基因中发现恶性间皮瘤常见的基因改变,故认为WDPM和恶性间皮瘤在基因上不同^[12,15]。

关于WDPM的标准化治疗尚无共识,治疗包括手术切除和药物治疗,后者包括化疗、放射治疗、免疫治疗和硬化治疗^[16]。有学者建议对可完全切除的局部病变行完全切除,无症状且无法完全切除的患者密切随访,对有多发病灶和乳头内有浸润性病灶的患者行细胞减灭手术和腹腔热灌注化疗^[17]。WDPM的预后大多良好,考虑有恶性转变的可能,建议随访治疗。

结合本例患者,患者为老年男性,无石棉接触史,以肠梗阻为首发表现,偶然于腹腔镜手术中发现病灶,病灶位于腹膜,病理活检所见符合WDPM常见的文献描述,免疫组化染色结果提示为间皮瘤,且良性可能性大,患者经过内科保守治疗后症状消失,随访信息提示病情暂时稳定。综上所述,高分化乳头状间皮瘤临床表现、实验室检查及影像学特征缺乏明确诊断依据,确诊依赖于术中探查、病理和免疫组化,提示临床医生应学习掌握该疾病的病理特征,注意鉴别诊断,可以提高诊断率,目前该疾病治疗尚无共识,有待进一步临床研究明确标准化治疗。

参考文献

- [1] Pang B, Liu Q, Liu Q, et al. Peritoneal well-differentiated papillary mesothelioma associated with infertility in a 37-year-old woman[J]. J Int Med Res, 2021, 49 (1): 300060520986680.

- [2] Shen P R, Cen J, Qian X Q, et al. Synchronous occurrence of benign mesothelioma and adenomatoid tumor of uterus: a case report and review of literature[J]. Medicine (Baltimore), 2019, 98 (20): e15746.
- [3] Bousema J E, van de Luijngaarden K M, Wilhelmus S, et al. Acute severe abdominal pain in a young woman caused by a well-differentiated papillary mesothelioma of the peritoneum[J]. BMJ Case Rep. 2019, 12 (8): e229769.
- [4] 刘晓雯, 钟艳平, 刘培焱, 等. 腹膜间皮瘤3例报告[J]. 临床肝胆病杂志, 2019, 35 (3): 623-626.
- [5] Alexander HR Jr, Burke AP. Diagnosis and management of patients with malignant peritoneal mesothelioma[J]. J Gastrointest Oncol, 2016, 7 (1): 79-86.
- [6] Chandramohan A, Shah N, Thrower A, et al. Communicating imaging findings in peritoneal mesothelioma: the impact of 'PAUSE' on surgical decision-making[J]. Insights into Imaging, 2021, 12 (1): 18.
- [7] 侯思竹, 刘爱东, 董丽儒, 等. 大网膜高分化乳头状间皮瘤1例[J]. 诊断病理学杂志, 2021, 28 (5): 356, 361.
- [8] Bazine A, Fetoichi M, Namad T, et al. A case of well-differentiated papillary mesothelioma of the male peritoneum: successful treatment by systemic chemotherapy[J]. Cureus, 2017, 9 (3): e1104.
- [9] Kim M, Kim HS. Clinicopathological characteristics of well-differentiated papillary mesothelioma of the peritoneum: a single-institutional experience of 12 cases[J]. In Vivo, 2019, 33 (2): 633-642.
- [10] Hatano Y, Hirose Y, Matsunaga K, et al. Combined adenomatoid tumor and well differentiated papillary mesothelioma of the omentum[J]. Pathology International, 2011, 61 (11): 681-685.
- [11] Saha A, Mandal PK, Manna A, et al. Well differentiated papillary mesothelioma of abdomen- a rare case with diagnostic dilemma[J]. Journal of Laboratory Physicians, 2018, 10 (2): 248-250.
- [12] Stevers M, Rabban JT, Garg K, et al. Well-differentiated papillary mesothelioma of the peritoneum is genetically defined by mutually exclusive mutations in TRAF7 and CDC42[J]. Mod Pathol, 2019, 32 (1): 88-99.
- [13] Fujishima F, Konosu-Fukaya S, Nabeshima K, et al. Histological and immunohistochemical characteristics and p16 status studied by FISH in six incidentally detected cases of well-differentiated papillary mesothelioma of the peritoneum[J]. Indian J Pathol Microbiol, 2021, 64 (2): 277-281.
- [14] Sun M, Zhao L, Weng Lao I, et al. Well-differentiated papillary mesothelioma: a 17-year single institution experience with a series of 75 cases[J]. Ann Diagn Pathol, 2019, 38: 43-50.
- [15] Shrestha R, Nabavi N, Volik S, et al. Well-differentiated papillary mesothelioma of the peritoneum is genetically distinct from malignant mesothelioma[J]. Cancers (Basel), 2020, 12 (6).
- [16] Chen YY, Li PC, Hsu YH, et al. Peritoneal well-differentiated papillary mesothelioma coexisting with endometrial adenocarcinoma mimicking peritoneal carcinomatosis: a case report[J]. Taiwan J Obstet Gynecol, 2020, 59 (6): 968-971.
- [17] Vogin G, Hettal L, Vignaud JM, et al. Well-differentiated papillary mesothelioma of the peritoneum: a retrospective study from the RENAPE observational registry[J]. Ann Surg Oncol, 2019, 26 (3): 852-860.

(收稿日期: 2020-04-25)

(校对编辑:)