

门静脉系统血栓致肠坏死病例1例并文献复习

辛兆瑞, 林天娇*

青岛大学, 山东 青岛

Email: 1366378254@qq.com

收稿日期: 2021年1月17日; 录用日期: 2021年2月2日; 发布日期: 2021年2月23日

摘要

目的: 本研究主要报道了一例因呕血为首发症状的门静脉系统血栓青年患者, 同时对门静脉系统血栓的病因、临床表现、影像学表现及治疗方式进行探讨, 提高对门静脉系统血栓的诊治认识。方法: 回顾性分析2020-08-02收治的一例门静脉系统血栓导致肠坏死患者的临床资料, 针对门静脉系统血栓相关资料查阅文献进行分析总结。结果: 根据影像学表现确诊为门静脉系统血栓, 予以抗凝、溶栓治疗, 后患者病情进展迅速, 出现肠坏死, 遂予以手术切除坏死小肠, 最终患者好转出院。结论: 门静脉系统血栓临床上较为少见, 致死率较高, 由于门静脉系统血栓少部分可导致患者出现肠坏死, 需要及时行手术治疗切除坏死肠段, 因而临床上早发现、早诊断、早治疗对提高患者治愈率具有重要意义。

关键词

门静脉系统血栓, 肠坏死

A Case of Intestinal Necrosis Caused by Portal Vein Thrombosis and Literature Review

Zhaorui Xin, Tianjiao Lin*

Qingdao University, Qingdao Shandong

Email: 1366378254@qq.com

Received: Jan. 17th, 2021; accepted: Feb. 2nd, 2021; published: Feb. 23rd, 2021

Abstract

Objective: This study mainly reports a young patient with portal vein thrombosis due to hema-

*通讯作者。

mesism as the first symptom. At the same time, we discussed the etiology, clinical manifestations, imaging findings and treatment of portal vein thrombosis so as to improve the diagnosis and treatment of portal vein thrombosis. **Methods:** The clinical data of a patient with intestinal necrosis caused by portal venous system thrombosis admitted on 2020-08-02 was retrospectively analyzed, and the literature related to portal venous system thrombosis was analyzed and summarized. **Results:** According to the imaging findings, the patient was diagnosed with portal vein thrombosis and was treated with anticoagulation and thrombolytic therapy. After that, the patient's condition progressed rapidly and intestinal necrosis appeared. Then the necrotic small intestine was surgically removed. Finally, the patient got better and was discharged. **Conclusion:** Portal vein thrombosis is relatively rare in clinical practice, and the fatality rate is high. A small part of the portal vein system thrombosis can cause intestinal necrosis in patients, so surgical treatment is timely required to remove the necrotic intestinal segment. Therefore, early detection, early diagnosis, and early treatment are of great significance to improve the cure rate of patients in clinical practice.

Keywords

Portal Vein Thrombosis, Intestinal Necrosis

Copyright © 2021 by author(s) and Hans Publishers Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

1. 引言

门静脉系统血栓是指发生于门静脉、肠系膜上、下静脉或脾静脉的血栓, 多见于肝硬化及门脉高压症的患者, 部分门静脉系统血栓可造成肠道坏死, 严重时可造成多脏器功能障碍综合征(Multiple organ dysfunction syndrome, MODS), 危及患者生命。由于门静脉系统血栓较为少见, 合并肠坏死病例则更罕见, 现将青岛大学附属医院 2020 年 8 月收治的一例病例报道如下(该病例报道已获得患者知情同意)。

2. 临床资料

患者, 男, 23 岁, 因“呕血、便血 7 小时”于 2020-08-02 入院, 既往体健, 否认糖尿病、高血压、肝炎病史, “头孢类”过敏。患者于入院 7 h 前无明显诱因出现呕血, 便血量较大, 颜色鲜红并伴有大量血块, 总量约为 400 ml, 伴有反复上腹痛, 呕吐后腹痛缓解, 无发热, 无咳嗽咳痰, 无头痛及意识障碍。查体: T 36.8℃ P 159 次/分 R 33 次/分 BP 117/78 mmHg 神志清, 精神差, 下肢小腿部位存在蚊虫叮咬皮损, 心、肺查体无异常, 腹部压痛。辅助检查: 白细胞 $20.26 \times 10^9/L$ (正常值 $4 \sim 10 \times 10^9/L$), 血红蛋白 120 g/L (正常值 120~165 g/L), 血小板 $37 \times 10^9/L$ (正常值 $100 \sim 300 \times 10^9$); 血凝常规: D-二聚体 22040 ng/ml (正常值 < 250 ng/ml), PT 比值 1.76 INR (正常值 0.8~1.2), PT 百分比活度 44% (正常值 80~120), 初步诊断为消化道出血。诊疗经过: 患者呕吐鲜红色血液, 伴有便血, 予以止血、抗感染、升血小板等对症支持治疗, 患者症状缓解, 腹痛、出血等症状均较前减轻, 行胃肠镜检查未见溃疡性及癌性病变, 行 CT 平扫示门静脉分支及密度增高, 小肠扩张积气积液, 肠壁水肿。为进一步明确诊断行上腹部 CT 动态增强扫描, 结果显示肠系膜上静脉、脾静脉、门静脉及其肝内分支血栓形成, 继发小肠梗阻、小肠壁水肿可能性大(见图 1), 请多学科会诊, 考虑患者目前症状与门静脉系统血栓形成有关, 遂于介入科行局麻下结肠动脉栓塞术 + 腹腔动脉造影 + 肠系膜上动脉置管术 + 股动脉置管溶栓术(肠系膜上动脉间接

溶栓), 术后患者有发热, 予以抗凝、抗感染、腹腔引流等对症支持治疗, 术后 2 周复查 CT: “肠梗阻伴肠壁水肿及腹腔积液”(见图 2), 联系全院会诊, 考虑患者出现小肠坏死, 于外科全麻下行“空肠部分切除术 + 十二指肠升段 - 空肠吻合术 + 肠粘连松解术 + 十二指肠造瘘减压术 + 胃造瘘术 + 胆囊造瘘术 + 空肠营养造瘘术”术后予以抗感染、补液、保护肝肾功能、纠正电解质紊乱、造瘘管引流等对症支持治疗, 患者恢复可, 于 2020-10-5 好转出院。

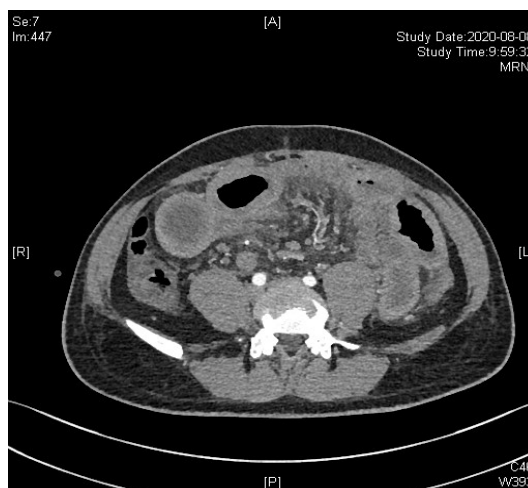


Figure 1. Image of thrombus
图 1. 血栓图像

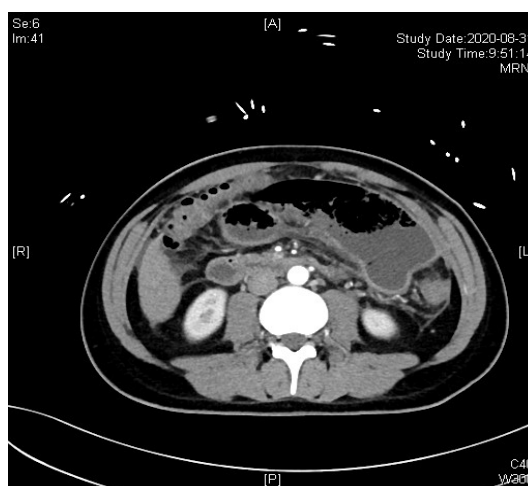


Figure 2. Image of intestinal obstruction
图 2. 肠梗阻图像

3. 讨论

门静脉系统血栓可由多种病因引起, 主要包括血液的高凝状态、门静脉血流速降低、血管内皮损伤等。血液的高凝状态可由遗传性或获得性血栓形成导致, 其中遗传性血栓形成可见于凝血酶原 G20210A 突变和 FVL 突变, 而该突变更多存在于肝硬化患者中[1], 获得性血栓形成状态则多见于原发性骨髓增生性疾病、阵发性睡眠性血红蛋白尿、恶性肿瘤等疾病[2] [3]。

门静脉血流速降低至 15 cm/s 以下时, 血栓形成几率增加, 主要见于肝硬化、肝脏肿瘤压迫、布加综

合征等疾病[1], 而炎症、感染、外伤等均可造成门静脉血管内皮损伤, 进而激活凝血系统, 促使血栓形成。

门静脉系统血栓发病率较低, 但由于缺乏特异性临床表现, 实验室检查多无特异性变化, 确诊较为困难, 容易误诊, 致死率较高[4]。误诊原因主要与患者的临床表现多样, 无明显特异性有关, 患者可有腹痛、腹泻、恶心、腹胀等消化系统症状, 由食物刺激诱发腹痛时需要与胰腺炎、胃炎等疾病鉴别, 腹泻症状需要与肠道细菌感染鉴别, 腹胀、恶心等症状需要与肠梗阻等疾病鉴别。在影像学检查方面, CT平扫及增强CT在诊断门静脉系统血栓中具有重要意义, 但在病变较轻时可表现为阴性。

在针对门静脉系统血栓的治疗方面, 门静脉系统的再通是治疗的首要目标。查阅相关文献显示, 早期抗凝能获得更高的再通率[5], 通过抗凝使门静脉再通的比例可达到52.3% [6], 常用的抗凝药物包括低分子肝素、维生素K拮抗剂、华法林及新型口服抗凝药, 但抗凝时间尚不明确, 高凝状态疾病的患者可持续抗凝, 无特殊病因可抗凝3个月[7]。此外, 也可采用溶栓治疗, 溶栓药物主要包括尿激酶和组织型纤溶酶原激活剂, 针对部分患者门静脉系统血栓引起肠坏死时, 采取手术切除坏死肠段及肠系膜是有效的治疗方法, 术后需持续抗凝预防血栓再形成。

本例患者为青年男性, 早期以呕吐大量鲜血、便血为主要临床表现, 但胃肠镜检查未见明显异常, 早期主要予以补液、升血小板等对症支持治疗, 后结合患者增强CT结果, 考虑为门静脉血栓形成, 在予以抗凝、溶栓治疗后患者病情仍进一步进展, 出现肠缺血、坏死, 遂行手术治疗切除坏死组织。由于本例患者为青年男性, 无肝硬化、高血压等促使血栓形成的高风险因素, 临床上容易忽略, 考虑本例患者出现门静脉血栓的原因可能与早期出现大量呕血、凝血功能异常造成弥散性血管内凝血有关。结合本例患者, 我们认为针对不明原因腹痛、呕血病人, 尤其是一些症征不符的患者, 应尽早行CT检查进行门静脉系统血栓的鉴别诊断, 当高度怀疑门脉系统血栓时, 应尽早明确诊断并在无禁忌症情况下尽早实施抗凝、溶栓治疗[8][9], 既往研究表明, 在出现肠坏死前, 有效的抗凝治疗可以阻止病情进一步恶化[10][11], 而患者一旦出现腹膜炎、休克等表现, 应尽早行腹腔探查明确是否有肠坏死, 必要时可行手术治疗。

由于样本量有限, 本例报道对于门静脉系统血栓致肠坏死的阐述有一定的局限性, 希望对临床工作者们诊断及治疗类似疾病有一定的参考价值。

4. 结论

门静脉系统血栓临床上较为少见, 但预后差, 可引起肠道缺血坏死, 因而在临床工作中及时诊断及治疗具有重要意义。

参考文献

- [1] Walker, A.P. (2005) Portal Vein Thrombosis: What Is the Role of Genetics? *European Journal of Gastroenterology & Hepatology*, **17**, 705-707. <https://doi.org/10.1097/01.meg.0000170927.60979.1d>
- [2] Qi, X., He, C., Han, G., Yin, Z., Wu, F., Zhang, Q., Niu, J., Wu, K. and Fan, D. (2013) Prevalence of Paroxysmal Nocturnal Hemoglobinuria in Chinese Patients with Budd-Chiari Syndrome or Portal Vein Thrombosis. *Journal of Gastroenterology and Hepatology*, **28**, 148-152. <https://doi.org/10.1111/j.1440-1746.2012.07282.x>
- [3] Chawla, Y., Duseja, A. and Dhiman, R.K. (2009) Review Article: The Modern Management of Portal Vein Thrombosis. *Alimentary Pharmacology & Therapeutics*, **30**, 881-894. <https://doi.org/10.1111/j.1365-2036.2009.04116.x>
- [4] Qi, X. (2017) Portal Vein Thrombosis: Recent Advance. *Advances in Experimental Medicine and Biology*, **906**, 229-239. https://doi.org/10.1007/5584_2016_118
- [5] Turnes, J., García-Pagán, J.C., González, M., Aracil, C., Calleja, J.L., Ripoll, C., Abraldes, J.G., Bañares, R., Villanueva, C., Albillos, A., Ayuso, J.R., Gilibert, R. and Bosch, J. (2008) Portal Hypertension-Related Complications after Acute Portal Vein Thrombosis: Impact of Early Anticoagulation. *Clinical Gastroenterology and Hepatology*, **6**, 1412-1417. <https://doi.org/10.1016/j.cgh.2008.07.031>
- [6] Gîrleanu, I., Trifan, A., Stanciu, C. and Sfarti, C. (2018) Portal Vein Thrombosis in Cirrhotic Patients—It Is Always

-
- the Small Pieces That Make the Big Picture. *World Journal of Gastroenterology*, **24**, 4419-4427. <https://doi.org/10.3748/wjg.v24.i39.4419>
- [7] European Association for the Study of the Liver (2016) EASL Clinical Practice Guidelines: Vascular Diseases of the Liver. *Journal of Hepatology*, **64**, 179-202. <https://doi.org/10.1016/j.jhep.2015.07.040>
- [8] Qi, X., De Stefano, V., Li, H., Dai, J., Guo, X. and Fan, D. (2015) Anticoagulation for the Treatment of Portal Vein Thrombosis in Liver Cirrhosis: A Systematic Review and Meta-Analysis of Observational Studies. *European Journal of Internal Medicine*, **26**, 23-29. <https://doi.org/10.1016/j.ejim.2014.12.002>
- [9] Basili, S., Pastori, D., Raparelli, V. and Violi, F. (2018) Anticoagulant Therapy in Patients with Liver Cirrhosis and Portal Vein Thrombosis: Insights for the Clinician. *Therapeutic Advances in Gastroenterology*, **11**, 1-10. <https://doi.org/10.1177/1756284818793561>
- [10] Ichiba, T., Hara, M., Yunoki, K., Urashima, M., Harano, M., Naitou, H., Yamamoto, K. and Shintani, A. (2016) Baseline Disease Is a More Important Predictor of Intestinal Necrosis than CT Findings in Patients with Acute Mesenteric Ischemia. *The American Journal of Emergency Medicine*, **34**, 2261-2265. <https://doi.org/10.1016/j.ajem.2016.08.016>
- [11] de Franchis, R. (2015) Expanding Consensus in Portal Hypertension: Report of the Baveno VI Consensus Workshop: Stratifying Risk and Individualizing Care for Portal Hypertension. *Journal of Hepatology*, **63**, 743-752. <https://doi.org/10.1016/j.jhep.2015.05.022>