

重度妊娠期肝内胆汁淤积症合并HBV感染患者1例报告并文献复习

徐巾眺¹, 马春玲², 李 岩², 王黎明^{1*}

¹青岛大学附属医院西海岸院区妇科, 山东 青岛

²青岛大学附属医院西海岸院区产科, 山东 青岛

收稿日期: 2025年12月5日; 录用日期: 2025年12月28日; 发布日期: 2026年1月8日

摘 要

本文报告1例31岁孕34周初产妇病例。患者因“停经34周6天, 发现肝功能异常4月余”急症入院, 患者孕期产检未遵医嘱治疗, 缺乏对该疾病的认识, 肝功能控制欠佳, 入院后总胆汁酸 $67.8 \mu\text{mol/l}$, 患者乙肝病史2年余, 行急症剖宫产后转入ICU并行血浆置换。本文结合文献复习, 探讨妊娠期肝内胆汁淤积症合并HBV感染的病因及治疗, 旨在提高临床医生对该疾病的认识, 指导围产期管理, 并做好临床宣教工作。

关键词

妊娠期肝内胆汁淤积症, 血浆置换, 剖宫产术, 多学科协作诊疗, 乙肝病毒感染

A Case Report of Severe Intrahepatic Cholestasis of Pregnancy Complicated with HBV Infection and Literature Review

Jintiao Xu¹, Chunling Ma², Yan Li², Liming Wang^{1*}

¹Department of Gynecology, Xihai'an Campus, The Affiliated Hospital of Qingdao University, Qingdao Shandong

²Department of Obstetrics, Xihai'an Campus, The Affiliated Hospital of Qingdao University, Qingdao Shandong

Received: December 5, 2025; accepted: December 28, 2025; published: January 8, 2026

Abstract

This paper reports a case of a 31-year-old pregnant woman at 34 weeks of gestation. The patient

*通讯作者。

文章引用: 徐巾眺, 马春玲, 李岩, 王黎明. 重度妊娠期肝内胆汁淤积症合并 HBV 感染患者 1 例报告并文献复习[J]. 临床医学进展, 2026, 16(1): 620-624. DOI: 10.12677/acm.2026.161083

was admitted to the hospital due to “menopause for 34 weeks and 6 days, and abnormal liver function for more than 4 months”. The patient did not follow the doctor’s advice during pregnancy, lacked understanding of the disease, and the liver function was poorly controlled. After admission, the total bile acid was 67.8 $\mu\text{mol/l}$, and the patient had a history of hepatitis B for more than 2 years. After emergency cesarean section, he was transferred to ICU and plasma exchange was performed. Combined with literature review, this paper discusses the etiology and treatment of intrahepatic cholestasis of pregnancy complicated with HBV infection, aiming to improve clinicians’ understanding of the disease, guide perinatal management, and do a good job in clinical education.

Keywords

Intrahepatic Cholestasis of Pregnancy, Plasma Exchange, Cesarean Section, Multidisciplinary Collaborative Diagnosis and Treatment, Hepatitis B Virus Infection

Copyright © 2026 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

妊娠期肝内胆汁淤积症(intrahepatic cholestasis of pregnancy, ICP)是一种发生于妊娠中晚期的重要产科并发症, ICP 的临床特征是皮肤瘙痒和血清总胆汁酸(total bile acid, TBA)水平升高, 并多在分娩后迅速消退, 但 45%~90%的患者在后续妊娠的过程中仍会再次发病, 部分患者合并非酒精性肝硬化、丙型肝炎病毒感染、糖尿病等[1]。ICP 对母体风险较小, 但 TBA 可通过胎盘屏障并在胎儿体内及羊水中聚集, 可导致死胎、羊水胎粪污染和早产等严重并发症。有研究表明合并 HBV 感染的 ICP 产妇早产的发生率高于单纯 HBV 感染的产妇及单纯合并 ICP 的产妇[2]。

2. 病例报告

产妇 31 岁, 因“停经 34 周 6 天, 发现肝功能异常升高 4 月余”于我院就诊, G2P0 (1 年前孕 21 周因胎儿畸形行中孕引产术), 患者孕期定期产检, OGTT: 4.78-10.33-8.61 mmol/l, 行饮食控制血糖, 控制欠佳。乙肝病史 2 年, 规律口服富马酸替诺福韦治疗, 否认手术史及外伤史。4 月前于外院产检, 总胆汁酸 20.3 $\mu\text{mol/l}$, 给予熊去氧胆酸治疗, 未规律复查肝功能, 2 月前于外院复查总胆汁酸 37.9 $\mu\text{mol/l}$, 建议患者住院, 患者自觉无瘙痒不适, 自觉胎动良好, 拒绝住院。2025-10-10 于我院就诊, 总胆汁酸: 67.8 $\mu\text{mol/l}$, 甘油三脂 61.42 mmol/l, 总胆固醇 32.92 mmol/l, 血样颜色肉眼可见异常(见图 1)。遂急症收入院, 患者入院后完善各项检查及化验, 心电图、心脏超声等未见明显异常, 并给予患者持续胎心监护, 偶有胎心减速, 特请重症医学科、消化内科、新生儿科、麻醉科行多学科急会诊, 经多学科会诊后行急症剖宫产术, 手术顺利, 胎盘病理提示: 胎盘小叶结构大致正常, 局部可见梗死, 胎膜未见异常。新生儿出生后 Apgar 评分 10 分, 因早产转入新生儿科进一步观察, 产妇遵会诊意见转入 ICU。

患者于 ICU 行血浆置换 4600 ml (见图 2), 并于术后第 4 天转回产科病房, 复查总胆汁酸降至 31.7 $\mu\text{mol/l}$ (见图 3), 后顺利出院, 建议患者定期于感染科及消化内科复诊, 规律检测血脂变化, 婴儿发育正常于新生儿科出院。



Figure 1. The patient's serum sample at admission was severely chylous (triglyceride: 61.42 mmol/L)
图 1. 患者入院时血清样本，呈严重乳糜状(甘油三酯：61.42 mmol/L)



Figure 2. Patients undergoing plasma exchange in ICU
图 2. 患者于 ICU 行血浆置换

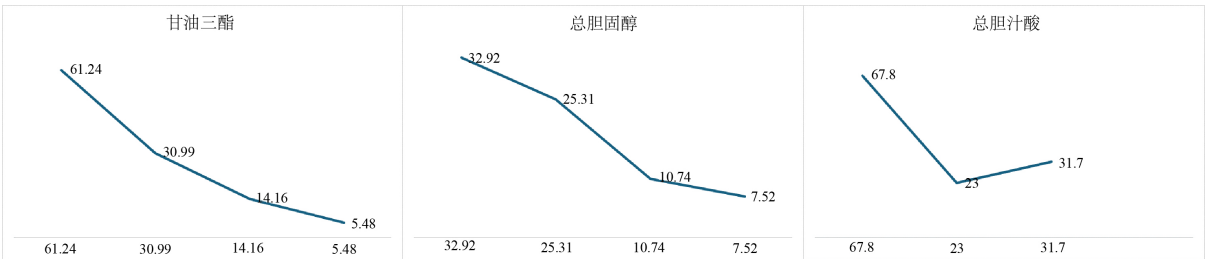


Figure 3. The change trend of triglyceride, total cholesterol and total bile acid after treatment in patients
图 3. 患者治疗后甘油三酯、总胆固醇、总胆汁酸的变化趋势

3. 讨论

妊娠期肝内胆汁淤积症多见于妊娠中晚期患者，以皮肤瘙痒、TBA 异常升高为典型临床表现，该疾病对母体的影响较小，但研究证实 ICP 可导致早产、羊水粪染等不良妊娠结局[3][4]。对于合并 HBV 感

染的孕妇,在乙型肝炎病毒及妊娠的共同作用下,其肝脏的基本代谢功能受影响,一旦发生 ICP,病情会更为复杂,预后更差。有研究表明,HBV 合并 ICP 组不良妊娠结局总发生率显著高于单纯 HBV 组[5]。究其原因,HBV 感染可以导致胎盘绒毛膜血管病变,从而导致胎盘功能下降,加重胎儿宫内缺氧,使新生儿罹患并发症的风险显著增加,这在既往报道中已明确[6]-[8]。对于合并 HBV 感染的 ICP 产妇,其肝功能受损也会导致病毒极易复制,进一步加重肝内胆汁淤积,二者可互为因果[9] [10]。

ICP 早期得到确诊及积极性治疗可很大程度上避免孕妇和婴儿产生危险[11]。多项研究表明,HBV 感染孕妇如孕期行母婴阻断治疗,合并 ICP 时新生儿 HBV 母婴传播发生率未见升高,围产期抗病毒预防在降低 HBV 母婴传播风险方面十分有效,且婴儿或产妇不良事件风险未见升高[12] [13]。因此,对于 HBV 合并 ICP 患者,孕期仍需规范行母婴阻断抗病毒治疗,在此基础上,应加强监测,提供早期治疗,进一步降低 TBA 水平,以减少新生儿不良分娩结局。

ICP 的患者会导致炎症状态下肝细胞的 DNA 修复能力下降,病毒整合及复制效率提高,同时,HBV 介导的肝细胞损伤会进一步削弱肝脏对胆汁酸的代谢排泄功能,加重 ICP。HBV 感染时,机体大量复制的 HBV 导致肝细胞炎症性坏死,促使胰岛素和胰高血糖素失活减少,最终机体出现葡萄糖耐量受损和胰岛素抵抗,同时,肝细胞损伤导致肝脏中己糖激酶和糖原合酶的合成减慢,活性降低。这说明 HBV 可直接或间接损伤胰岛 β 细胞,增加 GDM 患病率[14]。反之,妊娠期糖尿病引发的高血糖状态会通过非酶糖化反应进一步损伤肝细胞,导致肝细胞线粒体功能障碍、氧化应激水平升高,不仅会加剧 HBV 感染所致的肝脏炎症,还会抑制胆汁酸转运体的表达,进一步降低胆汁酸排泄效率,加重 ICP 症状。ICP、HBV 感染和妊娠期糖尿病三者之间存在潜在协同作用,使本例患者的临床表现尤为突出。

4. 总结

妊娠期肝内胆汁淤积症合并 HBV 感染的患者发生新生儿胎宫内窘迫及胎死宫内等风险明显增加,是 ICP 及 HBV 互为因果的结局,其治疗不能单纯针对 ICP,同时也要孕期规律抗病毒治疗,同时孕产妇的救治病情极为复杂,需要多学科协助诊疗为母婴健康保驾护航。

声 明

该病例报道已获得患者的知情同意。

参考文献

- [1] Mashburn, S., Schleckman, E., Cackovic, P., Shellhaas, C., Rood, K.M. and Ma'ayeh, M. (2021) Intrahepatic Cholestasis of Pregnancy: Risk Factors for Severe Disease. *The Journal of Maternal-Fetal & Neonatal Medicine*, **35**, 8566-8570. <https://doi.org/10.1080/14767058.2021.1988924>
- [2] Wei, H., Zhang, C., Meng, J., Zhao, Z. and Pang, Q. (2021) The Clinical Features of Hepatitis B Virus Infection and Intrahepatic Cholestasis in Pregnancy. *Ginekologia Polska*, **93**, 389-395. <https://doi.org/10.5603/gp.a2021.0109>
- [3] Ren, S., Zhou, Y. and Xuan, R. (2021) Research Progress in the Role of Gut Microbiota and Its Metabolites in Intrahepatic Cholestasis of Pregnancy. *Expert Review of Gastroenterology & Hepatology*, **15**, 1361-1366. <https://doi.org/10.1080/17474124.2021.2011211>
- [4] Jiang, R., Wang, T., Yao, Y., Zhou, F. and Huang, X. (2020) Hepatitis B Infection and Intrahepatic Cholestasis of Pregnancy: A Systematic Review and Meta-Analysis. *Medicine*, **99**, e21416. <https://doi.org/10.1097/md.00000000000021416>
- [5] 肖菊, 吴利荣, 肖波, 等. 妊娠期 HBV 感染合并肝内胆汁淤积症对妊娠结局的影响[J]. 中华医院感染学杂志, 2022, 32(13): 2066-2070.
- [6] Ovadia, C., Sajous, J., Seed, P.T., Patel, K., Williamson, N.J., Attilakos, G., *et al.* (2021) Ursodeoxycholic Acid in Intrahepatic Cholestasis of Pregnancy: A Systematic Review and Individual Participant Data Meta-Analysis. *The Lancet Gastroenterology & Hepatology*, **6**, 547-558. [https://doi.org/10.1016/s2468-1253\(21\)00074-1](https://doi.org/10.1016/s2468-1253(21)00074-1)
- [7] Zhan, Y., Xu, T., Chen, T. and Wang, X. (2022) Intrahepatic Cholestasis of Pregnancy and Maternal Dyslipidemia: A

- Systematic Review and Meta-Analysis. *Acta Obstetrica et Gynecologica Scandinavica*, **101**, 719-727. <https://doi.org/10.1111/aogs.14380>
- [8] Smith, D.D. and Rood, K.M. (2020) Intrahepatic Cholestasis of Pregnancy. *Clinical Obstetrics & Gynecology*, **63**, 134-151. <https://doi.org/10.1097/grf.0000000000000495>
- [9] Zhang, C., Wei, H. and Zhu, Y. (2021) Adverse Pregnancy Outcomes and Mother-To-Child Transmission in Patients with Hepatitis B Virus Infection and Intrahepatic Cholestasis of Pregnancy. *Ginekologia Polska*, **93**, 396-404. <https://doi.org/10.5603/gp.a2021.0110>
- [10] Gao, X., Duan, X., Cai, H., Hu, Y., Liu, M., Kang, K., *et al.* (2020) Pregnancy Outcome of Women with Chronic Hepatitis B Who Discontinued Antiviral Treatment before or in the Early Pregnancy. *International Journal of Medical Sciences*, **17**, 170-175. <https://doi.org/10.7150/ijms.38410>
- [11] 李侠, 肖维. 丁二磺酸腺苷蛋氨酸联合熊去氧胆酸对妊娠期肝内胆汁淤积症患者胆汁酸、肝功能及妊娠结局的影响[J]. 中国肝脏病杂志(电子版), 2019, 11(4): 55-60.
- [12] Funk, A.L., Lu, Y., Yoshida, K., Zhao, T., Boucheron, P., van Holten, J., *et al.* (2021) Efficacy and Safety of Antiviral Prophylaxis during Pregnancy to Prevent Mother-To-Child Transmission of Hepatitis B Virus: A Systematic Review and Meta-Analysis. *The Lancet Infectious Diseases*, **21**, 70-84. [https://doi.org/10.1016/s1473-3099\(20\)30586-7](https://doi.org/10.1016/s1473-3099(20)30586-7)
- [13] 熊霞鹂, 朱云霞, 魏宏, 等. 妊娠期肝内胆汁淤积症对 HBV 感染孕妇妊娠不良结局的影响[J]. 临床肝胆病杂志, 2022, 38(8): 1763-1767.
- [14] Zhang, S., Zong, Y., Hu, Y., Sheng, Y. and Xiao, G. (2023) High HBV-DNA Serum Levels Are Associated with Type 2 Diabetes in Adults with Positive HBsAG: An Observational Study. *Frontiers in Endocrinology*, **14**, Article 1146798. <https://doi.org/10.3389/fendo.2023.1146798>