

• 病例报告 •

经皮经肝门静脉穿刺胰岛移植术后并发出血 1 例

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【摘要】 经皮经肝门静脉穿刺具有安全性高、创伤性小的特点, 已成为胰岛移植最常用的方式, 而出血是胰岛移植术后罕见的并发症。天津市第一中心医院器官移植中心收治 1 例 1 型糖尿病(T1DM)患者, 在接受经皮经肝门静脉穿刺胰岛移植术后腹腔内大量出血, 通过介绍该病例, 旨在提高对胰岛移植术后并发症的认识, 为减少经皮经肝门静脉穿刺胰岛移植术后并发症的发生提供经验。

【关键词】 胰岛移植; 出血; 并发症

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One case of concurrent hemorrhage after pancreatic islet transplantation by percutaneous transhepatic portal approach Zhang Boya, Pei Guanghui, Zhang Yamin, Wang Zhiping, Wang Lianjiang, Xie Yan, Wang Jinshan, Wang Shusen

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【Abstract】 The percutaneous transhepatic portal approach is the most commonly used technique for islet transplantation, largely owing to its safety and minimally invasive characteristic. Bleeding complications after islet transplantation are rare. A case of type 1 diabetes mellitus (T1DM) was treated in Tianjin First Center Hospital, who had a massive intra-abdominal hemorrhage after percutaneous transhepatic portal vein catheterization for islet transplantation. Through the review of the overall development of the case, we aim to improve the awareness of the complications of islet transplantation, to reduce the incidence of complications after percutaneous transhepatic portal vein transplantation, and to provide experience.

【Key words】 Islet transplantation; Bleeding; Complications

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1 型糖尿病(T1DM)是器官特异性自身免疫性疾病, 体内 β 细胞被破坏而导致胰岛素分泌不足, 不可避免出现视网膜病变、糖尿病肾病、心血管病变等严重并发症^[1-3]。目前认为, 胰岛移植是治疗 T1DM 的有效手段^[4-5], 而经皮经肝门静脉穿刺是胰岛移植最常用的方式^[6]。本院 1 例 T1DM 患者实施经皮经肝门静脉穿刺胰岛移植术后发生罕见的出血并发症, 现将救治体会报告如下。

1 病例资料

患者女性, 25 岁, T1DM 病史 14 年, 肾移植术后 2 年。入院后在局麻下行经皮经肝门静脉穿刺胰岛移植术, 移植胰岛细胞 477 100 个胰岛当量(IEQ), 组织量 2 mL, 术后门静脉压力 7 mmHg(1 mmHg=0.133 kPa), Onyx 胶封堵穿刺道。术后静脉泵入肝素 3 U·kg⁻¹·h⁻¹, 监测血糖及出凝血时间。术后 6 h 患者血压降至 80/60 mmHg, 心率 > 90 次/min, 并出

现腹痛、乏力、眼睑苍白、腹部膨隆等症状。急查血常规: 血红蛋白(Hb)96 g/L, 较术前下降 25 g/L; 腹部超声见腹腔积液。经多巴胺升压、巴曲亭抗凝、静脉补液、输悬浮红细胞 2 U、冰冻血浆补充凝血因子等治疗后, 血常规检查示 Hb 继续下降, 活动性出血诊断明确, 积极行外科干预止血治疗。

术中可见患者肝右叶膈下约 800 mL 凝血块, 腹腔、盆腔有不凝血达 800 mL, 清理后可见肝右叶 6 段近下缘有穿刺针孔 5 个, 其中 1 个出现活动性渗血, 予电凝止血。术后患者血糖水平较平稳, 一般情况良好, 出院前查空腹 C-肽为 0.522 nmol/L。

2 讨论

将胰岛细胞移植到门静脉符合生理需求, 且胰岛素直接分泌到肝脏吸收较好, 可以较好地控制血糖^[7-9]。经皮经肝门静脉胰岛移植手术创伤较小, 并发症发生率低, 主要并发

症包括静脉血栓形成和出血^[10-11]等。目前,胰岛移植术后并发症采用对症治疗,如术后静脉血栓形成可采用肝素抗凝治疗,轻度出血可采用单纯输血治疗^[12]等。

本例患者T1DM病史14年,行经皮经肝门静脉穿刺胰岛移植术后常规抗凝预防血栓形成及血液介导的即刻炎症反应(IBMIR)。术后出现血压下降、心率加快、腹痛、乏力、眼睑苍白等表现,超声示腹腔积液,Hb持续下降,提示患者出现休克、活动性出血^[13]。及时予以纠正凝血、补充血容量等治疗后未见明显改善。经皮经肝门静脉穿刺后出血主要包括肝周出血、肝内出血及腹腔出血^[13]。本例患者采用腹腔镜穿刺或手术清理腹腔内积血,腹腔镜穿刺虽然可引出腹腔内不凝血,但无法彻底止血,而且凝血块残存在腹腔内不易吸收,还易导致感染,因此,积极行手术干预治疗,术中可明确出血原因、位置并止血。

经皮经肝门静脉穿刺胰岛移植术后需常规肝素抗凝,达到全身肝素化状态,预防静脉血栓形成,因此存在继发出血风险。本例患者采用液体胶类栓塞穿刺道,为永久性栓塞剂,但由于技术等原因,穿刺时可能因多条入路导致肝周存在多个针孔,采用不出肝改变穿刺入路的方法可以减少此类并发症的发生,同时需监测血常规及出凝血时间。为降低出血风险,亦可采用经颈内静脉穿刺门静脉胰岛细胞移植术^[14],但操作较为困难;此外,除肝脏为常用胰岛移植部位外,还包括大网膜^[15]、眼前房、肾包膜、皮下^[16]等,今后仍需继续探索更适于胰岛移植的部位。

目前关于胰岛移植术后并发症的临床资料甚少,对该病例进行经验总结,旨在提高对胰岛移植术后并发症的认识,今后需密切监测患者的生命体征,早诊断并积极治疗,增加此类并发症的临床资料积累,尽量减少经皮经肝门静脉穿刺胰岛移植术后并发症的发生。

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