

12. Ebra M, Kita K, Sugiura N, et al. Therapeutic effect of percutaneous ethanol injection on small hepatocellular carcinoma: evaluation with CT. Radiology, 1995, 188: 371-377.

13. Lencioni R, Pinto F, Armillotta N, et al. Long term results of percutaneous ethanol injection therapy for hepatocellular carcinoma in cirrhosis: a European experience. Eur Radiol, 1997, 7: 514-519.

14. Castellano L, Calandra M, De Vecchio C, et al. Predictive factors of survival and intrahepatic recurrence of hepatocellular carcinoma in cirrhosis after percutaneous ethanol injection: analysis of 71 patients. J Hepatol, 1997, 27: 862-870.

15. Livraghi T, Giorgio A, Marin G, et al. Hepatocellular carcinoma and cirrhosis in 746 patients: long term results of percutaneous ethanol injection. Radiology, 1995, 197: 101-108.

16. Ishii H, Okada S, Nose H, et al. Local recurrence of hepatocellular carcinoma after percutaneous ethanol injection. Cancer, 1996, 77: 1792-1796.

17. Imari Y, Sakamoto S, Shinichi S, et al. Hepatocellular carcinoma not detected with plain US: treatment with percutaneous ethanol injection under guidance with enhanced US. Radiology, 1992, 185: 497-500.

18. Hayashida K, Ooi J, Omagari K, et al. Percutaneous ethanol injection therapy by ethanol mixed with CO₂ microbubble for hepatocellular carcinoma. Nippon Shokakibyo Gakkai Zasshi, 1997, 94: 730-738.

19. Akamatsu K, Miyauchi S, Ito Y, et al. Development and evaluation of a needle for percutaneous ethanol injection therapy. Radiology, 1993, 186: 284-286.

20. Giorgio A, Tarantino L, Francica G, et al. One shot percutaneous ethanol injection of liver tumors under general anesthesia: preliminary data on efficacy and complications. Cardiovasc Intervent Radiol, 1996, 19: 27-31.

21. Livraghi T, Lazzaroni S, Pellicano S, et al. Percutaneous ethanol injection of hepatic tumors: single session therapy with general anesthesia. AJR, 1993, 161: 1065-1069.

22. Tanaka K, Nakamura S, Numata K, et al. Hepatocellular carcinoma: treatment with percutaneous ethanol injection and transcatheter arterial embolization. Radiology, 1992, 185: 457-460.

23. Ishii H, Okada S, Sato T, et al. Effect of percutaneous ethanol injection for postoperative recurrence of hepatocellular carcinoma in combination with transcatheter arterial embolization. Hepatogastroenterology, 1996, 43: 644-650.

(收稿日期: 2000-03-06)

• 病例报告 •

移植肾微导管栓塞治疗一例

谭孝华 许日初 熊宗凡 睦卫国

男性, 42 岁。肾移植术后 5 年, 慢性排异反应, 无尿 6 个月, 每周血透 2 次维持生命, 一般情况良好。彩超显示右髂窝内移植肾脏体积变小, 肾动脉主干细小, 血供减少, 阻力指数增加。生化: 血清肌酐 309 μ mol/L, 血清尿素氮 25mmol/L, 临床要求结束移植肾、再行肾移植。

技术与方法: 在局麻下, 采用 Seldinger 插管选择移植肾相对的一侧股动脉穿刺, 将造影导管送至移植侧的髂外动脉造影, 显示移植肾的血管及血供情况(见图 1)。根据移植肾动脉的直径大小选择微导管(一般 3F/2F)及配套的同轴导引导管。先将导引导管送至移植肾动脉开口, 再送入带超滑微导丝的微导管, 在微导丝的引导下, 将微导管送入肾动脉分支近端, 抽回导丝, 装入 3mm 的微型弹簧圈(长度 3~5cm)。用 1ml 的注射器抽 1ml 造影, 将微型弹簧圈送至靶血管。在装弹簧圈之前, 应用微导管造影证实导管在所栓塞血管。弹簧圈到位后, 应再行髂外动脉造影, 确认栓塞成功(见图 2)。

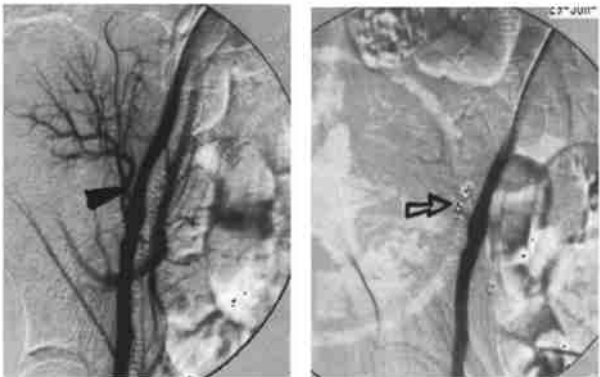


图 1 移植侧髂外动脉造影, 显示移植肾的血管及血供情况

图 2 移植肾血管弹簧圈栓塞, 示移植肾的血管及血供情况

(收稿日期: 2000-04-17)