

论著

超声引导下颈内静脉留置永久性双腔导管在维持性血液透析患者中的应用

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摘要:

目的: 探讨在维持性血液透析患者中采用实时超声引导留置永久性双腔导管的价值, 并对其成功率、并发症进行临床分析。方法: 2012年1月至2012年10月对我院共63例(男39例, 女24例)维持性血液透析患者留置永久性双腔导管。在Logiq 5彩色多普勒超声仪实时引导下, 均经颈内静脉采用Seldinger技术加撕脱型扩张导管置管法植入永久性血液透析导管。分析记录穿刺次数、手术成功率、手术时间以及术后并发症的发生率。并将患者分为一般患者及高危患者两组进行对比, 曾经有过颈内静脉临时置管或曾经有过置管困难情况或配合差、肥胖、衰弱、骨骼畸形及凝血功能异常者为高危患者。结果: 全部患者采用实时超声引导经颈内静脉留置永久性导管成功率100%, 其中高危患者20例(31.7%); 有60例患者一次性置管成功(95.2%); 穿刺次数1~3(1.23±0.21)次; 3例患者出现术中即刻并发症(4.7%); 在使用过程中导管感染3例(4.7%)。手术时间高危组患者长于一般患者组[(30.6±0.11) min vs (19.1±0.09) min, P<0.05]; 两组在穿刺次数, 置管成功率、术中并发症方面的差异无统计学意义(P>0.05); 但高危组(4/20, 20%)在长期使用导管过程更易因导管血栓形成而导致流量不佳。结论: 采用超声引导下颈内静脉留置永久性双腔导管是一种安全、有效的血管通路技术, 成功率高; 不论在一般患者还是一般患者中都具有操作简单、并发症少的特点, 值得在临床广泛推广。

关键词: 永久性双腔留置导管 实时超声引导 血液透析 血管通路

Real-time ultrasound guided placement of permanent internal jugular vein catheters in maintenance hemodialysis patients

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Abstract:

Objective: To investigate the value of real-time ultrasound guided placement of permanent internal jugular vein (IJV) catheterization in maintenance hemodialysis patients, and analyze its technical success and complication rate. Methods: We prospectively analyzed 63 patients (39 males, 24 females) who underwent permanent IJV cannulation with real-time ultrasound guidance from January to October in 2012. Under the real-time guidance of Logiq 5 color Doppler, we placed the tunneled cuffed catheters into the jugular vein by Seldinger technique. The number of needle punctures, technical success, the operation time, and complications were recorded. The patients were divided into a normal-risk group and a high-risk group: those who suffered multiple catheter insertions, previous difficulties during catheterization, poor compliance, obesity, impaired consciousness, skeletal deformity, disorder of haemostasis were regarded as high-risk patients. Results: Cannulation of IJV was done in all patients. Of the 63 catheters, 20 (31.7%) were placed in the high-risk patients; 60 (95.2%) were successfully placed at the first attempt, with the average number of punctures of (1.23±0.21) (range 1 - 3); Only 3 immediate complications (4.7%) developed; 3 (4.7%) catheter infections occurred in the course of using. Cannulation of IJV took longer time in the high-risk group than that in the normal-risk group [(30.6±0.11) min vs (19.1±0.09) min, P<0.05]. The number of needle punctures, percent of successful cannulation, and the frequency of immediate complications were similar in the high- and normal-risk groups. It was more likely to form catheter thrombosis during long-term use in the high-risk group (4/20, 20%) which might cause poor blood flow. Conclusion: Permanent

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IJV cannulation under real-time ultrasound guidance is very safe with high success rates. Nephrologists can use this technique with ease and with minimal complications in both normal- and high-risk patients.

Keywords: permanent internal jugular vein catheter real-time ultrasonography hemodialysis vascular access

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