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论著

## 71例患者肾移植术后血流感染临床表现、病原菌组成及耐药性分析

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**摘要:** 目的: 了解肾移植术后血流感染的临床特点、病原菌组成情况及耐药性, 指导抗生素在肾移植术后的合理应用。方法: 2003年7月至2013年6月10年间在本院住院的肾移植术后经血培养证实的血流感染患者71例中共检出菌株81株, 以BD微生物鉴定系统进行药敏试验了解其病原菌组成及耐药性特征, 并收集相关患者临床资料。结果: 病原菌构成中革兰阴性杆菌处于优势(67.90%), 革兰阳性菌次之(28.40%), 真菌最少(3.70%)。对革兰阴性杆菌最为敏感的药物为氨基糖苷类和碳青霉烯类抗生素, 耐药性最高的为第1代头孢类抗生素和半合成青霉素, 其次是第2代头孢类、单环β内酰胺类及磺胺类抗生素; 对革兰阳性菌耐药性最低的为糖肽类及恶唑烷酮类。结论: 肾移植后血流感染的临床特点包括高热、近期感染为主及死亡率高等。尽管革兰阳性菌是重要致病菌, 本院肾移植术后血流感染病原菌以革兰阴性杆菌为主, 革兰阴性菌和革兰阳性菌均有很高的抗生素耐药性。

**关键词:** 肾移植 血流感染 病原体 耐药性

Manifestation, distribution of pathogen, and resistance of bloodstream infections after renal transplantation: clinical analysis of 71 patients

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**Abstract:** Objective: To investigate the clinical manifestation and determine the distribution of pathogens and their characteristics of drug susceptibility to bloodstream infections (BSIs), and provide evidence for clinical anti-infection treatments after renal transplantation.

Methods: Totally 81 episodes of BSIs occurred in 71 patients between July 2003 and June 2013. We retrospectively analyzed the pathogens and their drug susceptibility characteristics with BD microbiological assay system. We also collected the clinical and laboratory data of the patients.

Results: The main pathogens were gram negative bacteria (67.90%), followed by gram positive bacteria (28.40%) and fungi (3.70%). The most common gram negative bacillus was *Escherichia coli*. While for gram positive bacteria, the main bacillus was coagulase-negative *staphylococci*. The gram negative bacteria were relatively sensitive to aminoglycosides and carbapenem. The gram positive bacteria were sensitive to glycopeptides and oxazolidone.

Conclusion: The clinical manifestations included high body temperature, onset in the early period after kidney transplantation and high mortality. Though gram positive coccus plays an important role, most infections are caused by gram negative bacteria in BSIs after the renal transplantation. The antibiotic resistant rate for gram negative bacteria is very high as well as gram positive bacteria.

**Keywords:** renal transplantation bloodstream infections pathogen resistance

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