

# DRUG-RESISTANT BACTERIAL INFECTIONS AMONG RENAL TRANSPLANT RECIPIENTS: RISK FACTORS AND CLINICAL OUTCOMES

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## Aim:

Analyze the incidence and localization of bacterial infection in RTx recipients, the phenotype pattern of susceptibility to the routinely available antibacterials, risk factors for acquisition of antibiotic-resistant bacteria and the impact of infection with such bacteria on graft survival and estimated glomerular filtration rate (e-GFR) at one year

## Methods:

We conducted a descriptive, retrospective study from the medical records from all the transplanted patients between 2009-2013. The end-points examined were: Pathogen Isolated, Antibacterial resistance, Urinary tract manipulation, Previous infections treated, first year graft survival.

UTI: Urinary tract infections.

GNB: Gram Negative Bacillus

BI: Bacterial Infections

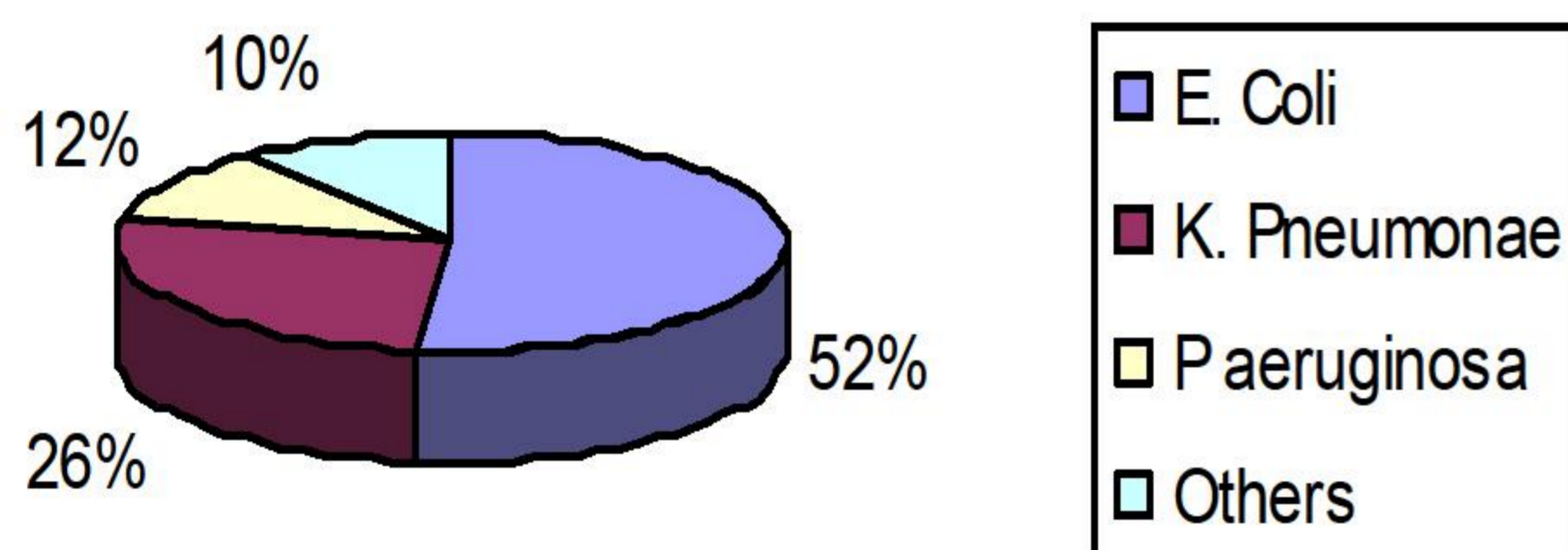
Statistical analysis: SPSS v.15.0

81 transplanted patients between 2009 -2013

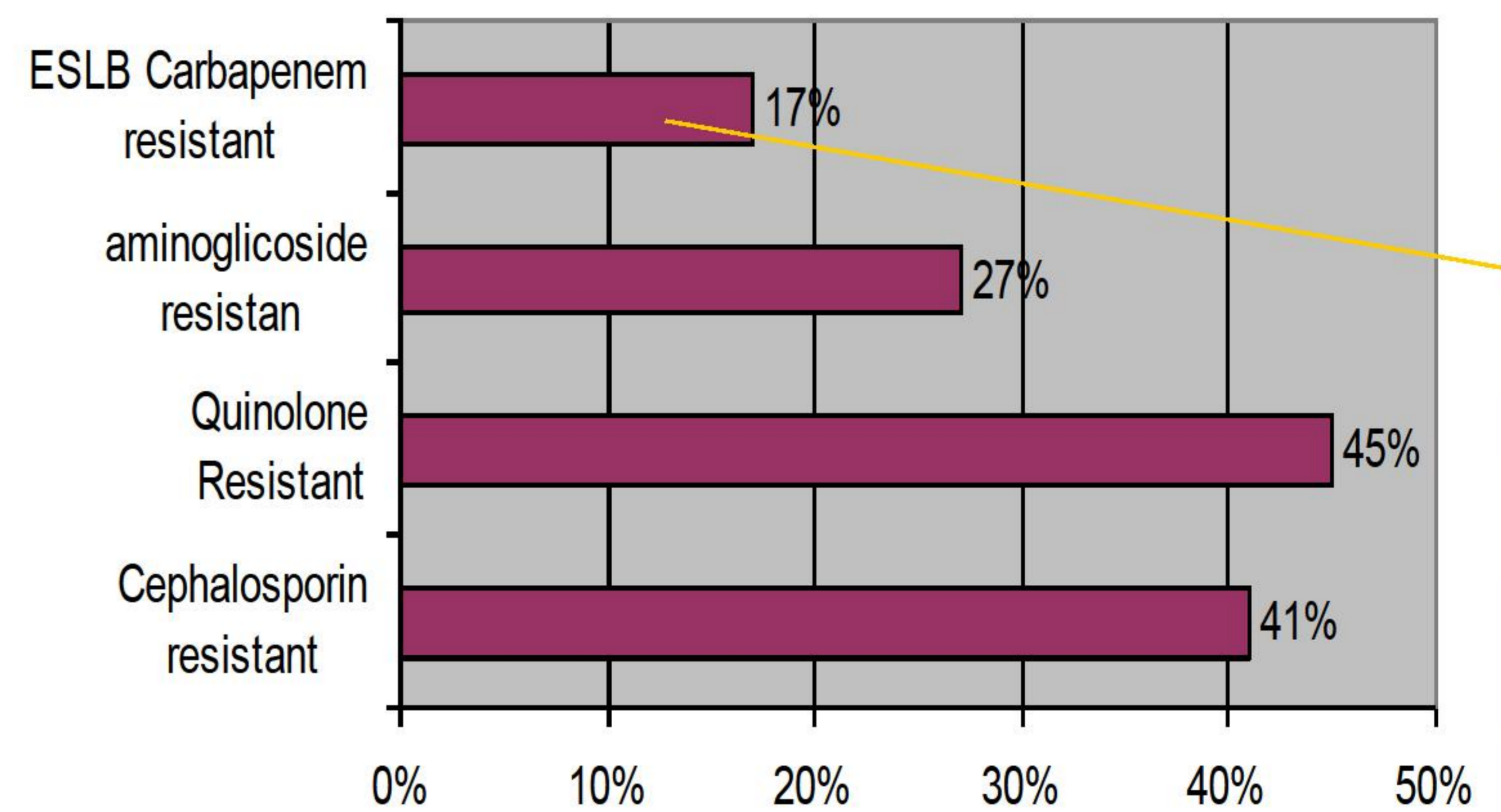
127 episodes of BI in 42 patients

- 72,4% UTI
- 17,3% bloodstream infection

## Principal Pathogens Isolated



## Antibacterial resistance among GNB



50 % K. pneumoniae  
25 % P. aeruginosa

## Independent variables associated with resistant GNB infections

Variable	OR	IC 95 %
Urinary tract manipulation	6,4	2,9 - 40,2
Previous infections that required use of antibiotics	5,1	4,5 - 21

- 1 year graft survival was lower (*but not significant*) in patients with antibiotic-resistance GNB infection (100% vs 84,2%, p=0,126)
- e-GFR was **significantly reduced at one year**, compared with patients with no drug-resistant infection (46.1 ± 13.5 vs 57.6 ± 15.6 ml/min, p=0.047).

**Conclusions:** After RTx, most infections are caused by gram negative bacteria. The most frequent source of infection is urinary tract. Infection with multiresistant-bacteria confers a worse prognosis.

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