NOSOCOMIAL INFECTION BY MULTIRESISTANT PATHOGENS IN KIDNEY TRANSPLANTED PATIENTS

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ORJECTIVES 1

To evaluate the prevalence of nosocomial infection (NI) by multidrug-resistant (MDR) pathogens, etiologic agents and treatments given to a cohort of patients undergoing kidney transplantation (KT).

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MATERIAL AND METHODS

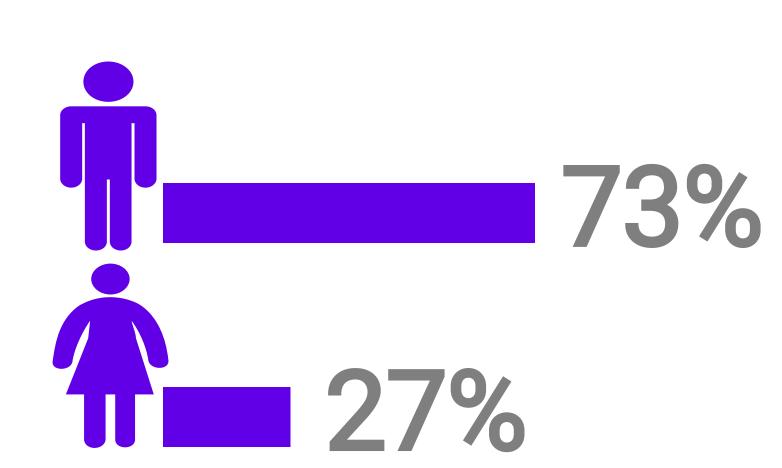
Retrospective, observational cohort study of patients having undergone a KT.

- Study period: 2016-2017
- Variables demographics: age and sex
- Variables clinical: type of KT and etiologic agent
- Variables therapeutic: induction immunosuppressants treatments and empirical and targeted antimicrobials

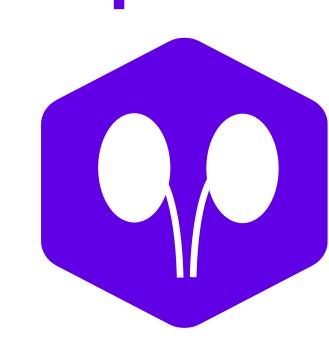
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RESULTS





64 patients



average 54 years

cadaver

8% alive donor

8% kidney-pancreas

Induction immunosuppressants: Basiliximab+mycophenolate-mofetil+steroid+tacrolimus (31,2%) and thymoglobulin+mycophenolate-mofetil+steroid+tacrolimus (65,6%)

- 8 of 64 patients developed NI by MDR pathogens during their hospitalization as a result of the KT (prevalence: 12.5%)
- Were isolated a total of 10 multi-resistant causative agents: Escherichia coli (30%), Pseudomonas aeruginosa (20%), Klebsiella pneumoniae ESBL (20%), OXA-48 (20%) and carbapenemase (10%].
- Sources of NI: urinary tract (50%), central venous catheter (30%) and abdominal (20%)

Empirical antibiotics were: ceftazidime (30%), ciprofloxacin (20%), ceftriaxone (20%), meropenem (10%), levofloxacin (10%), piperacillin-tazobactam (10%).

- Ceftazidime-avibactam was used in 2 patients of infection with MDR carbapenemase oxa-48-producing K. pneumoniae.
- None of the patients was exitus due to the NI.
- 40% of the patients treated with the immunosuppressants regimen that included basiliximab developed NI by MDR pathogens in contrast to the group that received the one including thymoglobulin (2.5%)(p=0.0875).

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CONCLUSIONS

In our cohort of patients there is a high prevalence of NI by MDR pathogens, Klebsiella pneumoniae the most frequent. Ceftazidime is the most commonly used antibiotic as an empirical treatment, and the urinary infections the most prevalent. It seems to exist a correlation between developing a infection by MDR pathogens and the induction immunosuppressants treatments that included basiliximab, although prospective studies with a larger sample size are needed to confirm these preliminary results.