Introduction:
Outcomes of simultaneous pancreas-kidney (SPK) transplantation have been improved over the decades. The increasing success is a result of improved surgical technique, better organ preservation, potent immunosuppression therapy and effective use of antibiotics. Nevertheless, morbidity and mortality following SPK transplantation remain high, mainly owing to infection.

Methods:
Retrospective analysis of patients admitted for SPK transplantation from 2013-2018 in an Intensive Care Unit (ICU). Immunosuppression was done with thymoglobulin, tacrolimus, mycophenolic acid and corticosteroids. Ceftazidime and fluconazole prophylaxis were given for 7 days as well as valganciclovir and trimethoprim/sulfamethoxazole. Infections were diagnosed by the presence of fever with clinical findings that could not be attributed to other cause. Microbiological samples were collected at admission and when suspicion of infection was present.

Results:
Total of 90 patients were admitted to ICU after SPK transplantation. Mean age 37,4±6,4 years. Donor’s mean age 34,6±11,6 years. Kidney and pancreatic graft thrombosis happened in 5,6% and 18,9%, respectively, and bleeding in 21,1%. Forty-one (45,6%) developed at least one infection during hospital stay. Infection during ICU was found in 13,3% and main pathogens were gram negative bacilli sensible to beta-lactam. After ICU, the incidence of multi-drug resistant pathogen was 13,5%, predominantly gram negative bacilli. Fungal infection was lower 4%. All-cause hospital mortality rate was 5,6%.

Conclusion:
Infectious complications are the main cause of morbidity and mortality following SPK transplantation. The administration of broad-spectrum prophylactic antibiotics are leading to the appearance of multi-drug resistant pathogens. Knowing local microbiological flora may be helpful, allowing more adequate antibiotic prophylaxis.

References: