POS08
15/04/2021
Poster Area
05:00 – 06:00

POS-189
URINARY TRACT INFECTION IN RENAL TRANSPLANT RECIPIENTS: EXPERIENCE OF A SINGLE DEPARTEMENT
LETAIF, S1, Ben Salem, M*,2, Hamouda, M2, Letaief, A2, Aloui, S2, Skhiri, H2
1Fattouma Bourguiba Hospital, nephrology, kairouan, Tunisia, 2Fattouma Bourguiba hospital, Nephrology, Monastir, Tunisia

Introduction: Urinary tract infection (UTI), is the most common cause of infectious complications in kidney transplant recipients. These infections remain suspect due to their impact on graft survival and therefore on the morbidity and mortality of this population. These can occur at any time but with the highest incidence in the first 3–6 months after transplantation. Aims were as follows: 1. Assess the prevalence of UTI in kidney transplant recipients. 2. Identify the risk factors for UTI in kidney post transplantation. 3. Study the microbiological profile and therapeutic attitudes of these UTIs.

Methods: This is a descriptive and analytical retrospective study, carried out between January 2017 and November 2019 at the renal transplant unit in the nephrology department of Fattouma Bourguiba Hospital in Monastir. We included all kidney transplant patients hospitalized during this period.

Results: During this period, 360 patients were hospitalized. UTI was diagnosed in 32 patients. The average age of our population was 35.5 ± 9.6 years with a sex ratio of 1. The prevalence of UTI in kidney transplant recipients was estimated at 8.8%. The graft acute pyelonephritis was diagnosed in 32 patients. The average age of our population was 35.5 years.

Conclusions: Several other risk factors have been identified in the literature not objectified in our study; their recognition is important to identify kidney transplant recipients who are more likely to develop urinary tract infections and to minimize the risk with personalized care. For example, adequate screening and prophylaxis.

No conflict of interest

POS-190
RENAL PROGNOSIS OF HEMOLYTIC UREMIC SYNDROME IN ADULTS
Bouaffif, H*,1, Haji, M1, Triqui, C1, Kazdagli, H1, Nasri, I1, Hedri, H1, Barbouch, S1, Ben Hamida, F1, Gorsane, I1, Ben Abdallah, T1
1Charles Nicolle hospital, Medecine A, tunis, Tunisia, 2Charles Nicolle hospital, Medecine A, Tunis, Tunisia, 3Charles Nicole hospital, Medecine A, Tunis, Tunisia

Introduction: Hemolytic uremic syndrome (HUS) is caused by intrarenal thrombotic microangiopathy, leading to high blood pressure and acute renal failure. The most common form of HUS is secondary to shiga toxin-producing bacteria, typically Escherichia coli. Atypical HUS (aHUS) has been used to classify any HUS not caused by shiga toxin. It is characterized by the triad of thrombocytopenia, microangiopathic hemolytic anemia, and acute renal failure.

The aim of our study was to determine the clinical features and the renal prognosis of the HUS occurring in adults.

Methods: We conducted a retrospective study of 19 patients over a period of 27 years (1990–2017) in our nephrology department.

We defined hypertension as an increase in systolic blood pressure > 140 mmHg or diastolic blood pressure > 90 mmHg on the basis of the European Society of cardiology.

We defined anemia as a hemoglobin levels lower than 13 g/100ml for adult males, 12 g/100ml for adult females non pregnant, 11 g/100ml for adult females pregnant.

We defined thrombocytopenia as platelets levels lower than 150000/mm3.

AKI is defined as any of the following (Not Graded): Increase in SCr by X0.3 mg/dl (X26.5 mol/l) within 48 hours or Increase in SCr to X1.5 times baseline, which is known or presumed to have occurred within the prior 7 days or Urine volume <0.5 ml/kg/h for 6 hours on the basis of KDIGO.

We included patients aged over 16 years old with biopsy proven thrombotic microangiopathy. We collected the following parameters: age, gender, co-morbidities, clinical exam, biological assessment, treatment.

Results: We included 19 patients. There were 15 men (79%) and 4 women (21%). Sex ratio 3.75 with a median age 36 years old (19–60). The inaugural symptoms were dominated by headaches in 52% of cases. It was associated to malignant high blood pressure. The median of PAS was 143 mmHg. And the median of PAS was 90 mmHg on the basis of the European Society of cardiology.

We included patients aged over 16 years old with biopsy proven thrombotic microangiopathy. We included the following parameters: age, gender, co-morbidities, clinical exam, biological assessment, treatment.

Results: We included 19 patients. There were 15 men (79%) and 4 women (21%). Sex ratio 3.75 with a median age 36 years old (19–60). The inaugural symptoms were dominated by headaches in 52% of cases. It was associated to malignant high blood pressure. The median of PAS was 143 mmHg. And the median of PAS was 90 mmHg on the basis of KDIGO.

We included patients aged over 16 years old with biopsy proven thrombotic microangiopathy. We collected the following parameters: age, gender, co-morbidities, clinical exam, biological assessment, treatment.

Results: We included 19 patients. There were 15 men (79%) and 4 women (21%). Sex ratio 3.75 with a median age 36 years old (19–60). The inaugural symptoms were dominated by headaches in 52% of cases. It was associated to malignant high blood pressure. The median of PAS was 143 mmHg. And the median of PAS was 90 mmHg on the basis of KDIGO.

We included patients aged over 16 years old with biopsy proven thrombotic microangiopathy. We collected the following parameters: age, gender, co-morbidities, clinical exam, biological assessment, treatment.

Results: We included 19 patients. There were 15 men (79%) and 4 women (21%). Sex ratio 3.75 with a median age 36 years old (19–60). The inaugural symptoms were dominated by headaches in 52% of cases. It was associated to malignant high blood pressure. The median of PAS was 143 mmHg. And the median of PAS was 90 mmHg on the basis of KDIGO.
The evolution has been marked by a progressive improvement in renal function in 37% of cases but 74% of patients maintained chronic kidney failure then requiring hemodialysis in 58% of cases after a mean of follow-up of 14 months (3 to 32 months).

Three patients had kidney transplant. One death occurred and was secondary to acute pulmonary edema.

Conclusions: The diagnosis of aHUS is complex and challenging, but is essential because of the devastating consequences of inadequate treatment. The prognosis of HUS has been improved by plasma exchange but chronic renal insufficiency is still common.

In cases of end-stage renal failure, kidney transplantation remains a solution but genetic mutations are an important risk factors for the occurrence of aHUS during the post-transplant injury.

No conflict of interest

POS-191
EXTERNAL VALIDATION AND COMPARISON OF RISK PREDICTION SCORING TOOLS FOR ACUTE KIDNEY INJURY IN PATIENTS WITH MYOCARDIAL INFARCTION IN A TERTIARY HOSPITAL IN DAVAO CITY

CAJONES, RM*, Togonon-Leano, JI
1Metro Davao Medical Research Center- Inc., Internal Medicine Department, Davao City, Philippines, 2Metro Davao Medical & Research Center- Inc., Internal Medicine - Nephrology, Davao City, Philippines

Introduction: Patients with acute myocardial infarction are at high risk of developing acute kidney injury (AKI). In settings where AKI biomarkers are not readily available, the use of a scoring system upon patient’s admission may benefit those with high probability of developing AKI as this may allow prompt institution of renal protective measures such as avoidance of overzealous diuresis, wide variations in blood pressure, use of high volume contrast media, acute anemia from blood loss, and use of relatively nephrotoxic agents that may require renal dose adjustments and, perhaps, an early nephrology referral.

Methods: From January 2015 to December 2019, a total of 384 charts were gathered based on inclusion criteria. After thorough chart review, 317 charts were excluded and 69 patient charts were included for the study. The continuous baseline characteristics of AKI and non-AKI patients in this study were analyzed using Shapiro-Wilk Test for normality. Comparison of these baseline characteristics was done using Independent Sample T-test and presented as mean and standard deviation otherwise, Mann-Whitney U Test was used and presented with mean rank. Pearson Chi Square or Fisher’s Exact Test was used to compare categorical characteristics. A p-value of <0.05 was considered statistically significant.

Overall diagnostic accuracy of both scoring tools was assessed by area under the receiver operating characteristic (AUROC) curve. SPSS was used to determine the specificity, sensitivity and AUROC of all possible cut-off scores for each scoring tool. Online statistical calculators were used to calculate for the positive predictive value (PPV), negative predictive value (NPV), accuracy, and likelihood ratios.

Results: The study population consisted of 69 patients, 23 (33.3%) of whom developed acute kidney injury based on the KDIGO criteria. These patients were further categorized as having stage 1 (78.3%), stage 2 (17.4%), or stage 3 (4.3%) AKI.

The two risk scoring tools used in this study to predict the occurrence of acute kidney injury in those who had an acute myocardial infarction are those of Abusaada et al and Xu et al. The cut-off scores for Abusaada’s and Xu’s tools are similar at >2/4. Results showed a higher sensitivity analysis for Xu (91% vs 61%). However, Abusaada’s scoring tool had higher values for specificity (85% vs 7%), PPV (66.7% vs 32.8%), NPV (81.2% vs 60%), accuracy (76.8% vs 34.7%), and positive likelihood ratio (4 vs .98). For purposes of comparison, the scoring tool of Xu required adjustment to arrive at the cut-off score with the highest accuracy. After adjustment, AUROC values were calculated showing .717 (95% CI: .58-.86) for Abusaada and .764 (95% CI: .64-.89) for Xu which had no statistical difference (p-value .447).

Conclusions: This study concluded that there is a high incidence of AKI in patients with acute myocardial infarction. Of the available recently validated risk assessment tools that can stratify patients in terms of developing AKI, between Xu et al and Abusaada et al, this study favors the use of the Abusaada scoring system because it did not require any adjustment to arrive at the highest accuracy level. This scoring can be employed immediately upon admission to aid in the preemptive management of AKI in patients with myocardial infarction. This was found to have a good predictive index for AKI occurrence in the setting of AMI.

No conflict of interest

POS-192
TRANSPLANT RENAL ARTERY STENOSIS: EPIDEMIOLOGIC PROFILE AND THERAPEUTIC PARTICULARITIES

OUERTANI, I1, Chargui, S*, Omran, M1, Bacha, M1, Hedri, H1, Ben Abdallah, T1
1Charles Nicolle Hospital, Internal Medicine Department, Tunis, Tunisia

Introduction: Transplant renal artery stenosis (TRAS) is a serious complication that might occur at any time during the postoperative period. It is a serious predictor of graft loss. The purpose of our study was to identify the epidemiologic profile of TRAS, and to analyze the therapeutic particularities as well as the patients’ evolving profile.

Methods: All cases of TRAS noted in the follow up of our patients from 1970 to 2019 were reviewed retrospectively in our transplantation department.

Results: A total of 10 patients (7 men, 3 women) were diagnosed with TRAS, with a median age of 37 (32-69 years). The original nephropathy was glomerular in four cases, reno-vascular and chronic interstitial in respectively four and two case. Seven patients received renal grafts from living donors, while the three others received allografts from brain-deceased patients. In all patients, end-to-side anastomosis was performed. The median time to presentation was 240 days. Seven patients presented during the early post-transplantation process (<15 days). Clinical presentation was delayed graft function in three cases, secondary graft function deterioration in two case and acute hypertension in five cases. The nadir post-transplant serum creatinine level was 240 mmol/L (103-300 mmol/L), while the serum creatinine value at admission was 415 mmol/L (132-1061 mmol/L). The stenosis was anastomotic in eight case and pre-anastomotic in respectively four and two case. Seven patients received percutaneous transluminal angioplasty (PTA) and seven patients received surgical revascularization with four patients undergoing renal artery bypass.

Conclusions: This study confirmed that the incidence of AKI in patients with acute myocardial infarction. Of the available recently validated risk assessment tools that can stratify patients in terms of developing AKI, between Xu et al and Abusaada et al, this study favors the use of the Abusaada scoring system because it did not require any adjustment to arrive at the highest accuracy level. This scoring can be employed immediately upon admission to aid in the preemptive management of AKI in patients with myocardial infarction. This was found to have a good predictive index for AKI occurrence in the setting of AMI.

No conflict of interest