

determine an mGFR with gold standard method at least for those pts at eGFR lower than 60 mL/min/1.73 m<sup>2</sup> who deserve surgical operations, anti-coagulant therapies, nephrotoxic drugs, oncological medical therapies (included experimental protocols) and radiological contrast medium agents injections.

**SAT-093**

**THE STRANGE CASE OF RENAL FUNCTION AFTER RADICAL NEPHRECTOMY: A FOGGY FORECAST**



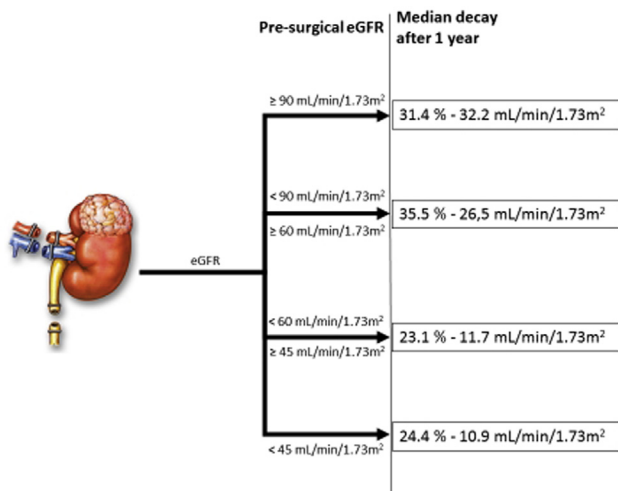
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**Introduction:** The risk of developing a mild to severe chronic kidney disease stage after radical nephrectomy represents one the major nightmare for oncological patients who require surgery for kidney cancer. The fear of a renal replacement therapy which may occur after the operation in patients with a baseline compromised renal function drives the choice of the surgical approach for clinicians. But are we really sure that removing a kidney means the halving of the baseline eGFR? Are we able to select at baseline which patient will develop acute kidney injury and which one no? And finally, do we exactly know if a mild to severe CKD stage at baseline represents a risk factor to decrease eGFR in comparison to normal renal function pts? Aim of our work is to better understand this pathological-physiological mechanism of compensation.

**Methods:** We collected retrospectively clinical data of a group of 114 patients who underwent RN for the presence of a benign or malignant renal mass. To evaluate the risk to develop acute kidney injury (AKI) after surgery, serum-creatinine (sCr) values were collected before surgery and after 1 year the surgery. We estimated Glomerular Filtration Rate (eGFR) with CKD-EPI formula. According to RIFLE criteria, we defined the AKI onset with a ratio of sCr/sCr(t0) higher than 1.5 during hospitalization. Moreover, to investigate a possible correlation between renal basal histology and renal functional decay, two renal biopsies (> 20 glomerula for each section) were performed on each renal tissues [from the healthy part of the removed kidney > 3cm far from tumor]. A pathological evaluation using a chronicity score (Remuzzi Score) was subsequently carried out evaluating damage on four parameters: (a) glomerular global sclerosis, (b) tubular atrophy, (c) interstitial fibrosis and (d) arterial narrowing. Statistical analysis were performed using generalized linear model (GLM), Kruskal-Wallis test and chi-square test. Statistically significant correlations were considered for p-value<0.05.

**Results:** At t0, 21% of the patients had an eGFR>90ml/min/1.73m<sup>2</sup>, 45% between 60 and 90, 23% between 30 and 45, and 11% under 45. Taking in account the percentage of decay there was a strong negative correlation with AKI onset (p<0.0001), a positive correlation with Diabetes (p<0.05) while no correlation with CKD Stage at t0 (p=0.051). No significative correlations were found between the decay of eGFR and other variables such as age, gender or comorbidities. Considering a subgroup of 98 patients the analysis enlightened a significative negative correlation between the eGFR decay and the presence of arterial narrowing (p<0.01) and tubular atrophy (p<0.05) but no correlation was found with the whole chronicity score.



**Conclusions:** Renal function after RN shows for each class of CKD stage after 1 year from surgery a diverse decay related to the baseline eGFR. Healthy patients display a huge decrease of eGFR in comparison to CKD stages III-IV which remain stable at 1 year. One possible explanation is that the healthy kidney of the patients affected by moderate and severe CKD starts working with a compensatory mechanism before the entire removal of the kidney with cancer so that the surgical acute nephron loss does not represent a shock in comparison to healthy patients. The second hypothesis is that CKD patients are treated in a more precise and specialistic way in comparison to the other.

**SAT-094**

**HEMODIALYSIS EMERGENCIES IN A NEPHROLOGY DEPARTMENT: ABOUT 117 CASES**



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**Introduction:** Hemodialysis (HD) emergencies in nephrology are very common. Prompt diagnosis and management are needed as it can be life-threatening. We aim to determine epidemiological, clinical, biological aspects as well as the etiological profile of our population.

**Methods:** We conducted a cross-sectional study during 3 months (February, March and April 2019) collecting patients who underwent at least one session of HD at our nephrology department. Were included patients aged over 18 years old. Were excluded chronic dialysis patients presenting for their usual session. Data collection was conducted from HD registers. We collected the following parameters: age, gender, comorbidities, initial nephropathy, clinical data(blood pressure, pulmonary auscultation, diuresis, oxygen saturation), the current treatment and biological data( creatinin, kalemia, hemoglobin, and gasometry).

Data were entered and analyzed using SPSS software. Chi-squared test with a level of significance of 0.05 was used for the qualitative variables.

**Results:** A total of 117 patients were included, mean aged 60.71 years old (range:28-90) with a sex ratio M/F at 1.3. Our population consists in 42 chronic HD patients(37.9%), 34 Patients with moderate to severe renal failure(RF) (29.9%) and 41 patients with acute kidney injury (AKI) (35%). Initial nephropathy causes were vascular in (40%), glomerular in(25%) and undetermined in(35%) of cases. Our patients had hypertension, diabetes, dyslipidemia in respectively (58%),(45%) and (7.6%). Twenty two chronic HD patients were anuric (48.8%). Seventy-nine patients were admitted from the emergency department(68%), 21 patients from the surgical and urology departments(18.4%),8 patients from the intensive care unit (7.6%) and 4 patients from other departments(4.2%). HD indications were acute pulmonary edema in (41.8%), metabolic acidosis in (41.8%), hyperkalemia in (37.6%). Uremic signs in (22.2%). Inadequate hyperkalaemic treatment was noted in( 22.7% )of cases. Conventional HD was performed with mean session duration of 3 hours. Ultrafiltration was required in 46 cases (36.8%) with an average of 1860ml(range:500-4000). Perdialytic complications were observed in(12.5%)of cases. Hypotension was the most common complication which leads to the interruption of the session in(5.9%)of cases. Disequilibrium syndrome was observed in 2 patients. Arrhythmia and acute cardiac failure were noted in 2 patients. Death occurred in 1 case caused by arrhythmia. Advanced age, anuria and underlying RF were independent risk factors of emergency dialysis with respectively (p=0.02, p=0.01 and p=0.05).

**Conclusions:** Dialysis emergencies remain frequent in our country. Acute Pulmonary edema and metabolic acidosis were the main indications followed by hyperkalemia and anuria. Poor and delayed chronic renal failure management could explain the frequent use of emergency HD. The analysis of the causes and dialysis modalities in emergency situations, contributes to adopt a preventive strategy in order to identify high-risk patients and to optimize treatment protocols.