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**BACKGROUND AND AIMS:** During lung surgery, preoperative fluids are given in restrict manner. This is in correspondence with the fact that lungs produce polyphasic injury during surgery and increased levels of different inflammation, traumatic and stress markers, on one side and a lack of fluids that complicate the transfer of water and kidney function on the other side [1]. One lung ventilation additionally complicate ventilation/perfusion ratio in the lungs, has overall impact on the whole body and to novel knowledge it indirectly leads to kidneys hypoperfusion and injurie [2]. The aim of our study is to evaluate the level of postoperative acute kidney injurie (AKI) occurrence in patients who underwent OLV.

**METHOD:** In prospective study, 60 patients that underwent lung resection in OLV, BMI < 30 m<sup>2</sup>, without hepatic or renal endocrine diseases, aged 45–65 at the University Clinic for thoracic surgery in Skopje were included. Patients who underwent prior haemotherapy or radiotherapy were excluded. In all patients, we evaluate the demographic, clinical, preoperative state, duration of OLV, operation data and fluid assessment. Primary, we evaluate the occurrence and staging of AKI according to KDIGO criteria [3, 4]. A total of 72 h postoperatively in all patients and post hoc, we correlate its occurrence to several factors.

**RESULTS:** On average, patients were 59.7 ± 5.9 SD years old. More males were operated (80%). Overall, AKI stage 1 occurred in total of 13.3% (8 patients), AKI stage 2 in 3.3% (2 patients) and AKI stage 3 in 1.6% (1 patient). OLV longer than 60 min was in 85% of the patients, and all stages AKI were after this time duration. Lobectomy was done in 65% of the patients, while pulmectomy in 18.3% and bilobectomy in 16.7%. In relation to type of surgery done most of the patients that had pneumectomy had AKI 1 (27.2%), and additionally, only in this analysed surgery group, AKI 3 occurred in 9%. In correspondence to the side operated, right side was operated in 57.7% of the patients, and most of the AKI occurred in the right-sided surgery. Most of the patients who developed AKI preoperatively had hypertension and other cardiovascular issues.

**CONCLUSION:** AKI occurs significantly after OLV, in relation to the type of surgery. Mainly when right-side surgery is done. However, more severe AKI occurs when pulmectomy is done. Fluid regiment, OLV longer than 60 min and some preoperative cardiovascular diseases may contribute to its occurrence.

#### REFERENCES

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**BACKGROUND AND AIMS:** The renal unit at Sunderland Royal Hospital (SRH) provides tertiary services to an area of North East England covering South Tyneside, Sunderland and County Durham. An AKI service was commenced in September 2020 at University Hospital North Durham (UHND), which is part of the County Durham and Darlington NHS Foundation Trust (CDDFT) with aims to improve recognition and treatment, support early discharge planning, and prevent severe injury for patients with AKI and renal conditions. The service comprises two specialist nurses and a team of consultant renal physicians providing in-reach at UHND across Monday–Friday 52 weeks/year, with over 700 patients seen within the first 12 months of operation.

With the introduction of this service, we carried out a review of transfer times for patients requiring transfer from UHND to SRH for inpatient renal management. Delays in patient transfer between hospitals can result in deferred treatment and poor patient outcomes, hence the importance of analysing the benchmarking the first year's performance to inform future service development both regionally and nationally. With the use of this data, we hope to share our model with other teams and trusts with the goal of enhancing and streamlining the referral methods to renal services.

**METHOD:** We examined transfer data for 36 patients from CDDFT to the renal unit at SRH over a 12-month period from August 2020 to July 2021. This information looked at transfers from the time of consultant acceptance to the time of arrival on the ward and was compiled in conjunction with the AKI specialist nurses at CDDFT. Using the computer system and phone records, we were able to accurately document time of acceptance to time of arrival. Data was split into categories to enable further comparison; pre-June 2021 (when haematology patients were excluded from the inpatient ward at SRH due to protective isolation during COVID-19) increasing the availability of acute renal beds and June 2021 onwards. Additionally, we analysed patients with acute kidney injury versus those that were known to us with chronic kidney disease, and times by week days and where emergency cover is usual.

**RESULTS:** The data showed a median time between acceptance and arrival for patients accepted pre-June 2021 of 8 h 7 min compared with 6 h 18 min from June 2021 onwards. Median time between acceptance and arrival of acute patients was 8 h 7 min compared with 6 h 35 min for chronic kidney disease patients. Acceptance and arrival times varied also depending on time of transfer; 6 h 29 min during working hours on a weekday, 9 h 23 min out-of-hours on a weekday and 8 h 48 min on a weekend. The overall median transfer time from acceptance to arrival across all categories was 7 h 38 min.

**CONCLUSION:** Currently, no standard national target exists for the transfer of patients to tertiary renal services, however there are ongoing discussions surrounding this and how it could be implemented. There are difficulties in compiling data to effect change in referral methods, in part due to the inter-trust movement of patients and challenges in coding; however, our initial findings support the positive impact of the AKI service at CDDFT and highlight the scope for further service development across the region. For example, in commissioning software to streamline, process audit data using a web-based portal, accessible to all parties and extending nurse presence across 7 days due to the delayed times for weekend and evening transfers. Additionally, we were encouraged that our prevalent patients, usually dialysis recipients, experienced the shortest wait.