

AKI

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March 2025

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1. Prevalence and Risk Factors of Acute Kidney Injury After Colorectal Cancer Surgery.

Authors: Abdulgalil A.E.;Metwally I.H.;Zuhdy M.;Alghandour R.;Hasan S.;Tarabeah S.;Shahda E. and Awny, S.

Publication Date: 2025

Journal: Journal of Gastrointestinal Cancer 56(1) (pagination), pp. Article Number: 45. Date of Publication: 01 Dec 2025

Abstract: Purpose: Acute kidney injury is a sentinel event affecting colorectal cancer patients either as a consequence of surgery or systemic chemotherapy. It is highly correlated with both short and longterm adverse outcomes. This work aimed to study the prevalence, risk factors, and impact on survival of postoperative (PO-AKI) and post-chemotherapy (PC-AKI) after colorectal cancer (CRC) surgery in Egyptian patients. Method(s): Data of the patients with CRC who underwent surgery over the previous 5 years was retrieved from an internet-based medical system. The incidence of PO-AKI and PC-AKI was calculated, the rate and time to resolution of PO-AKI were recorded, and the possible predictors of AKI were assessed using univariate and multivariate analysis; also, the impact of AKI on patients' survival was tested using survival curves. Result(s): Five hundred sixty-one cases fulfilled the inclusion criteria and were included in the study. PO-AKI was detected in 10.5% of the patients. Significant risk factors included intraoperative hypotension, sepsis, hypoalbuminemia, amount of intraoperative bleeding, neoadjuvant therapy, and preoperative chronic kidney disease (CKD). However, only neoadjuvant treatment (hazard ratio (HR) 2.2) and CKD (HR 3.3) maintained significant risk in the multivariate analysis. PC-AKI was observed in 18.7% of the patients treated. Significant risk factors were previous CKD and the chemotherapy type, mainly affecting those who received Irinotecan-based therapy. The hazard ratio was 8.5 and 2.4 respectively, in multivariate analysis. The overall survival was significantly worse in those who developed PO- or PC-AKI (p Result(s): Five hundred sixty-one cases fulfilled the inclusion criteria and were included in the study. PO-AKI was detected in 10.5% of the patients. Significant risk factors included intraoperative hypotension, sepsis, hypoalbuminemia, amount of intraoperative bleeding, neoadjuvant therapy, and preoperative chronic kidney disease (CKD). However, only neoadjuvant treatment (hazard ratio (HR) 2.2) and CKD (HR 3.3) maintained

significant risk in the multivariate analysis. PC-AKI was observed in 18.7% of the patients treated. Significant risk factors were previous CKD and the chemotherapy type, mainly affecting those who received Irinotecan-based therapy. The hazard ratio was 8.5 and 2.4 respectively, in multivariate analysis. The overall survival was significantly worse in those who developed PO- or PC-AKI (p Conclusion(s): AKI affects more than 25% of CRC patients after surgery and/or chemotherapy. Modifiable risk factors include preoperative hypoalbuminemia, intraoperative bleeding, and/or intraoperative hypotension. While, the more important risk factors were non-modifiable including CKD, neoadjuvant therapy, and Irinotecan-containing regimens. Most kidney injuries are stage I; however, they are associated with shorter overall survival.Copyright © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2025.

2. The role of amino acids and protein administration in preventing cardiac surgery-associated acute kidney injury.

Authors: Bottussi A.; D'Andria Ursoleo J.; Agosta V.T.; De Luca M. and Monaco, F.

Publication Date: 2025

Journal: Future Cardiology (pagination), pp. Date of Publication: 2025

Abstract: Acute kidney injury (AKI) persists as one of the most common complications after cardiac surgery. Beyond being burdened by high morbidity and mortality rates, effective therapeutic options are still lacking. To date, the management of cardiac surgery-associated AKI (CSA-AKI) mainly focuses on preventive strategies, e.g. the implementation of standardized care bundles. Interestingly, recent experimental studies have suggested a potential nephroprotective role for both amino acids (AA) and proteins. As such, these compounds show multiple beneficial renal effects, spanning enhancement of renal blood flow, improved oxygenation, and recruitment of renal functional reserve. Moreover, clinical studies have investigated the therapeutic potential of single AA, AA combinations, and proteins. A recent large multicenter randomized controlled trial showed reduced AKI incidence in cardiac surgery patients receiving intravenous AA supplementation. However, these interventions have not yet demonstrated beneficial effects on major clinical outcomes, such as survival. Given the well-established AA safety profile and the underlying biological rationale supporting their use, this review summarizes the existing literature on the effects of various formulations and combinations of perioperative AA and protein on renal outcomes when administered in cardiac surgery patients. Copyright © 2025 Informa UK Limited, trading as Taylor & Francis Group.

3. Effect of restrictive fluid resuscitation on severe acute kidney injury in septic shock: a systematic review and meta-analysis.

Authors: Cai X.E.;Ling W.T.;Cai X.T.;Yan M.K.;Zhang Y.J. and Xu, J. Y.

Publication Date: 2025

Journal: BMJ Open 15(2) (pagination), pp. Article Number: e086367. Date of Publication: 16 Feb 2025

Abstract: Objectives Sepsis-associated hypotension or shock is a critical stage of sepsis, and a current clinical emergency that has high mortality and multiple complications. A new restrictive fluid resuscitation therapy has been applied, and its influence on patients' renal function remains unclear. The purpose of this study is to evaluate the influence of restrictive fluid resuscitation on incidence of severe acute kidney injury (AKI) in adult patients with sepsis hypotension and shock compared with usual care. Design Systematic review and meta-analysis using the Grades of Recommendation, Assessment, Development and Evaluation (GRADE) approach. Data sources PubMed, Embase, Web of Science and Cochrane Library were searched through 1 November 2024. Eligibility criteria We included randomised controlled trials that compared restrictive fluid resuscitation with liberal fluid therapy on patients with sepsis-associated hypotension and shock, to find out their effect on the incidence of severe AKI. Severe AKI was defined as the AKI network score 2-3 or Kidney Disease Improving Global Outcomes stages 2 and 3. Data extraction and synthesis Two independent reviewers

used standardised methods to search, screen and code included trials. Risk of bias was assessed using the Cochrane Systematic Review Handbook for randomised clinical trials. Meta-analysis was conducted using random effects models. Sensitivity and subgroup analyses, trial sequential analysis (TSA). Egger's test and the trim-and-fill method were performed. Findings were summarised in GRADE evidence profiles and synthesised qualitatively. Results Nine trials (3718 participants) were included in this research and the analysis was conducted in random effects model. There was a significant difference in the incidence of severe AKI (risk ratio 0.87, 95% CI 0.79 to 0.96, p=0.006; I2 =0%) and the duration of mechanical ventilation (mean difference -41.14, 95% CI -68.80 to -13.48; p=0.004; I2 =74%) between patients receiving restrictive fluid resuscitation and patients receiving liberal fluid resuscitation. TSA showed that the cumulative amount of participants met the required information size. the positive conclusion had been confirmed. The GRADE assessment results demonstrated moderate confidence in the incidence of severe AKI, as well as the results of all second outcomes except the Intensive Care Unit length of stay (ICU LOS), which received limited confidence. The result of incidence of worse AKI was rated as of high certainty. Conclusions It is conclusive that fluid restriction strategy is superior to usual care when it comes to reducing the incidence of severe AKI in sepsis-associated hypotension and shock. Shorter duration of ventilation is concerned with fluid restriction as well, but the heterogeneity is substantial. GRADE assessments confirmed moderate and above certainty. Traditional fluid resuscitation therapy has the potential to be further explored for improvements to be more precise and appropriate for a better prognosis.Copyright © Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

4. Incidence of Acute Kidney Injury After Exposure to Intravenous Contrast in Emergency Department Patients Presenting for Stroke.

Authors: Faruqi I.; Caffery T.; Colter M.; Williams C.; Trent A.; Cushner D.; Nelson J. and Davis, G.

Publication Date: 2025

Journal: Journal of Emergency Medicine 70, pp. 10–18

Abstract: Background: Chronic kidney disease (CKD) is to be considered an independent risk factor for developing post-computed tomography (CT) acute kidney injury (AKI); however, current data are limited. Objective(s): Examine the incidence of AKI after intravenous contrast exposure among patients with and without CKD. Method(s): A single-center retrospective study examined patients that presented to the Emergency Department and activated the stroke protocol, which involved an immediate CT angiogram. Patients were subdivided into "normal to mild" (glomerular filtration rate [GFR] > 60 mL/min/1.73 m2), CKD III (GFR 30-60 mL/min/1.73 m2), and CKD IV (GFR), and CKD IV (GFR 2) groups. The primary outcome was the development of AKI. Patients already on dialysis were excluded. Result(s): Among the 794 patients identified, 452 (56.9%) were classified as "normal to mild," 280 (35.3%) were classified as CKD III, and 62 (7.8%) were classified as CKD IV. Patients with normal GFR had a 2.4% incidence of developing AKI, those with CKD III had a 1.4% incidence, and patients with CKD IV had an 8.1% incidence of developing AKI. Overall, 2.5% of patients developed AKI. For CKD III vs. "normal" groups, odds ratio (OR) = 0.58 (95% confidence interval [CI] 0.16-1.72). For CKD IV vs. "normal," OR = 3.52 (95% CI 1.07-10.05). Of those patients with CKD IV who had AKI, all saw improvement in their creatinine prior to discharge and none required renal replacement therapy. Conclusion(s): This study builds on the evidence demonstrating that patients with CKD III are likely at the same risk of developing post-CT AKI as those with normal renal function. Furthermore, the risk of developing post-CT AKI in CKD IV patients may be far lower than previously thought, was transient, and did not result in renal replacement therapy.Copyright © 2024 Elsevier Inc.

5. Efficacy of melatonin on drug- or contrast-induced acute kidney injury: a systematic review and GRADE-assessed meta-analysis of experimental and clinical studies.

Authors: Ghasemi A.; Ghasemi M.; Rashidian M.; Bastan F. and Baghaei, A.

Publication Date: 2025

Journal: International Urology and Nephrology (pagination), pp. Date of Publication: 2025

Abstract: Objective: The objective of this systematic review and meta-analysis was to assess the efficacy of melatonin in drug- or contrast-induced AKI in preclinical and clinical studies. Method(s): PubMed, Embase, Scopus, Web of Science (WOS), the Cochrane Database of Systematic Reviews (CDSR), and clinical trials.GOV from the beginning until August 1, 2024. On the basis of the inclusion and exclusion criteria, the articles were included by two independent researchers. Data regarding study design, patient characteristics, the number of patients with and without AKI, and the means and SDs of the serum creatinine and BUN levels were extracted from relevant studies. STATA version 17.0 was used to compute pooled measures of standardized mean differences, standardized mean differences, risk ratios and risk differences. I2 and chi-square tests were used to assess heterogeneity between studies. Funnel plots, Egger tests and the trim-and-fill method were used to evaluate small study effects (publication bias). The risk of bias of the included clinical and preclinical studies was assessed via the Cochrane ROB tool and SYRCLE tool, respectively. The credibility of the results was evaluated via GRADE. Sensitivity analysis was performed via the one-out removal method. Result(s): We identified 1,696 nonduplicate records, of which the full texts of 159 articles were examined. Twentynine animal experimental studies and 5 clinical trials met the inclusion criteria and were included in the review. The results of the meta-analysis confirmed that melatonin was significantly effective at reducing the serum creatinine level (standardized mean difference: - 3.04; 95% CI - 3.904 to - 2.183, with 95% prediction interval: - 7.201 to 1.163) and the BUN level (standardized mean difference: - 3.464; 95% CI - 4.378 to - 2.549, with 95% prediction interval: - 7.839 to 0.911) in drug-induced AKI animal studies. Melatonin did not have a significant effect on the serum creatinine level (standardized mean difference: - 2.67; 95% CI - 9.69 to - 4.35, with 95% prediction interval: - 42.618 to 37.278) or the BUN level (standardized mean difference: - 1.77; 95% CI - 5.533 to - 1.994, with 95% prediction interval: -22.943 to 19.404) in contrast-induced AKI animal studies. Furthermore, in clinical studies, melatonin had no significant effect on reducing the serum creatinine level (standardized mean difference: 0.183; 95% CI -1.309 to 1.675, with 95% prediction interval: - 7.975 to 8.340), BUN level (standardized mean difference: 0.206; 95% CI - 0.0871 to 1.283, with 95% prediction interval: - 5.115 to 5.528) or risk of AKI incidence (risk ratio: 0.877; 95% CI 0.46 to 1.64, with 95% prediction interval: - 0.238 to 3.174; risk difference: - 0.06 mg/dl; 95% CI - 0.259 to 0.40 mg/dl, with 95% prediction interval: - 0.467 to 0.348). There were no significant publication biases, and after sensitivity analysis, no considerable changes were observed, indicating the robustness of the results. Conclusion(s): This meta-analysis indicates that melatonin may protect against drug-induced AKI in animal models but is not effective in clinical studies and that melatonin has no significant effect on contrast-induced AKI. Owing to the inconclusive results in clinical trials and very low certainty of evidence, further research with higher methodological quality is needed to reach a more certain conclusion.Copyright © The Author(s), under exclusive licence to Springer Nature B.V. 2025.

6. Treatment Effect Heterogeneity in Acute Kidney Injury Incidence Following Intravenous Antihypertensive Administration for Severe Blood Pressure Elevation During Hospitalization.

Authors: Ghazi L.; Chen X.; Harhay M.O.; Hu L.; Biswas A.; Peixoto A.J.; Li F. and Wilson, F. P.

Publication Date: 2025

Journal: American Journal of Kidney Diseases 85(4), pp. 442-453

Abstract: Rationale & Objective: Severe hypertension (HTN) that develops after hospital admission is prevalent in 10% of patients admitted for reasons other than HTN. Severe HTN is commonly treated with intravenous (IV) antihypertensives and is associated with a greater risk of acute kidney injury (AKI). We explored whether there is heterogeneity in IV antihypertensives' effect on AKI incidence among patients who develop severe HTN during hospitalization. Study Design: Heterogeneity of treatment effect analysis. Settings & Participants: Patients who developed severe HTN, defined as systolic blood pressure (BP) > 180 or diastolic BP > 110 mm Hg, during hospitalization and did not have kidney failure. Exposure: Treatment with IV antihypertensives within 3 hours of BP elevation. Outcome(s): Time to developing AKI. Analytical Approach: An accelerated failure time Bayesian

additive regression trees (BART) model to capture the association between the time to develop AKI and predictors. Individual treatment effects were estimated for each participant using a counterfactual outcome framework, and these estimates were used to identify patient characteristics associated with treatment effect heterogeneity in response to IV antihypertensives. Result(s): We included 11,951 patients who developed severe HTN, 741 were treated with IV antihypertensives, and 11,210 were not, of whom 18% and 13% developed AKI, respectively. Most patients would have been harmed from IV antihypertensive treatment except for a small subset of 317 patients who were White, had a systolic BP on admission >=156 mm Hg, an estimated glomerular filtration rate of >=70.7 mL/min/1.73 m2, and a serum bicarbonate of , and a serum bicarbonate of Limitation(s): Data-driven, hypothesis-generating approach. Findings were not validated with external data sources. Conclusion(s): These exploratory findings suggest that most patients who develop severe HTN will not benefit from IV antihypertensive treatment. Future studies should assess for heterogeneity when identifying treatment options, if any are needed, for severe HTN. Plain-Language Summary: Patients who develop severe blood pressure elevation during hospitalization are commonly treated with intravenous antihypertensives; however, this could lead to acute kidney injury (AKI). We wanted to assess whether this is consistent across all patients, using a new statistical approach that predicts what would happen if patients who were treated had not been treated and those who were not treated had been. We found that most patients will develop AKI, and only a small subset of patients might not. This exploratory study can help inform future studies on the treatment of hypertension that develops during hospitalization. Copyright © 2024 The Authors

7. Diuretics for preventing and treating acute kidney injury.

Authors: Hashimoto H.;Yamada H.;Murata M. and Watanabe, N.

Publication Date: 2025

Journal: Cochrane Database of Systematic Reviews 2025(1) (pagination), pp. Article Number: CD014937. Date of Publication: 29 Jan 2025

Abstract: Background: Acute kidney injury (AKI) is a well-known complication of critical illnesses, significantly affecting morbidity and the risk of death. Diuretics are widely used to ameliorate excess fluid accumulation and oliguria associated with AKI. Their popularity stems from their ability to reduce the energy demands of renal tubular cells by inhibiting transporters and flushing out intratubular casts. Numerous studies have assessed the effects of diuretics in the context of AKI prevention and treatment. However, a comprehensive systematic review addressing this topic has yet to be conducted. Objective(s): This review aimed to explore the benefits and harms of diuretics for both the prevention and treatment of AKI. Search Method(s): The Cochrane Kidney and Transplant Register of Studies was searched up to May 2024 using search terms relevant to this review. Studies in the Register are identified through searches of CENTRAL, MEDLINE, and EMBASE, conference proceedings, the International Clinical Trials Registry Platform (ICTRP) Search Portal, and Clinical Trials.gov. Selection Criteria: We selected randomised controlled trials (RCTs) and quasi-RCTs in which diuretics were used to prevent or treat AKI. Data Collection and Analysis: Two authors independently extracted data using standardised data extraction forms. Dichotomous outcomes were expressed as risk ratios (RR) with 95% confidence intervals (CI). Where continuous scales of measurement were used to assess the effects of treatment, the standardised mean difference (SMD) was used. The primary review outcomes for AKI prevention studies were the incidence of AKI and any use of kidney replacement therapy (KRT). For treatment studies, the primary outcome was any use of KRT. The certainty of evidence was assessed per outcome using the Grades of Recommendation, Assessment, Development and Evaluation (GRADE) approach. Main Result(s): We included 64 studies (83 reports, 9871 participants): 53 prevention studies (8078 participants) and 11 treatment studies (1793 participants). Studies were conducted in the following World Health Organization regions: the Americas (15), Eastern Mediterranean (9), Europe (25), South-East Asia (2), and the Western Pacific (13). Thirty-six studies were single-centre studies, 19 were multicentre, and the setting was unclear in nine studies. Diuretics were compared to placebo, no treatment or conventional therapy, saline solutions (isotonic or hypotonic), 5% dextrose, 5% glucose, Hartmann's solution, and Ringer's acetate. Overall, the risk of bias was low in one study, high in 19 studies, and of some concern in 41 studies. Three studies could

not be assessed because they did not report any outcomes of interest. For AKI prevention, compared to control, diuretics may reduce the risk of AKI (38 studies, 5540 participants: RR 0.75, 95%, CI 0.61 to 0.92; I2 = 77%; low-certainty evidence) and probably reduce any use of KRT (32 studies, 4658 participants: RR 0.63, 95% CI 0.43 to 0.91; I2 = 0%, moderate-certainty evidence) and death (33 studies, 6447 participants: RR 0.73, 95% CI 0.59 to 0.92; I2 = 0%; moderate-certainty evidence). The use of diuretics may result in little or no difference in the need for permanent dialysis (2 studies, 956 participants: RR 0.52, 95% CI 0.08 to 3.47; I2 = 21%; low-certainty evidence), hypotension (7 studies, 775 participants: RR 1.27, 95% CI 0.87 to 1.86; I2 = 0%; low-certainty evidence) and hypokalaemia (6 studies, 1383 participants: RR 1.20, 95% CI 0.88 to 1.73; I2 = 43%; low-certainty evidence), and had uncertain effects on arrhythmias (13 studies, 3375 participants: RR 0.77, 95% CI 0.57 to 1.04; I2 = 53%; very-low certainty evidence). Diuretics may make little or no difference to changes in SCr within 30 days (8 studies, 646 participants: SMD 0.41, 95% CI -0.01, to 0.83; I2 = 82%; low-certainty evidence) but it was uncertain whether diuretics increased urinary output (8 studies, 1155 participants: SMD 1.87, 95% CI -0.20 to 3.95; I2 = 99%; very low-certainty evidence). For AKI treatment, diuretics may make little or no difference to any use of KRT (8 studies, 1275 participants: RR 0.93, 95% CI 0.83 to 1.04; I2 = 2%; low-certainty evidence) or death (14 studies, 2052 participants: RR 1.08, 95% CI 0.96 to 1.22; I2 = 0%; low-certainty evidence). Diuretics may increase hypotension (2 studies, 720 participants: RR 1.99, 95% CI 1.16 to 3.41; I2 = 90%; low-certainty evidence) and probably increase arrhythmias (6 studies, 1011 participants: RR 1.62, 95% CI 1.12 to 2.33; I2 = 0%; moderate-certainty evidence). Diuretics may result in little or no difference in hypokalaemia (3 studies, 478 participants: RR 1.52, 95% CI 0.70 to 3.31; I2 = 0%; low-certainty evidence). It was uncertain whether diuretics increased urinary output (3 studies, 329 participants: SMD 4.40, 95% CI -0.94 to 9.74; I2 = 99%; very low-certainty evidence). The need for permanent dialysis and changes in serum creatinine were not reported. Authors' conclusions: When used for the prevention of AKI, diuretics may reduce the risk of AKI. However, our confidence in the effect estimate is limited. Diuretics probably reduce the incidence of KRT use, and we are moderately confident in the effect estimate. When used for the treatment of AKI, diuretics may make little or no difference to any use of KRT, and our confidence in the effect estimate is limited. More RCTs are needed to explore the role of diuretics for treating established AKI.Copyright © 2025 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

8. Risk factors analysis and prediction model establishment of acute kidney injury after heart valve replacement in patients with normal renal function.

Authors: Huang X.;Sun X.;Song J.;Wang Y.;Liu J. and Zhang, Y.

Publication Date: 2025

Journal: Frontiers in Cardiovascular Medicine 12(pagination), pp. Article Number: 1422870. Date of Publication: 2025

Abstract: Background: The study aimed to develop a risk prediction model through screening preoperative risk factors for acute kidney injury (AKI) after heart valve replacement in patients with normal renal function. Method(s): A total of 608 patients with normal renal function who underwent heart valve replacement from November 2013 to June 2022 were analyzed retrospectively. The Lasso regression was used to preliminarily screen potential risk factors, which were entered into the multivariable logistic regression analysis to identify preoperative independent risk factors for postoperative AKI. Based on the results, a risk prediction model was developed, and traditional and dynamic nomograms were constructed. The risk prediction model was evaluated using receiver operating characteristic (ROC), calibration curve, and decision curve analysis (DCA). Result(s): 220 patients (36.2%) developed AKI after surgery. Current smoker, hypertension, heart failure, previous myocardial infarction, cerebrovascular disease, CysC, and NT-proBNP were selected as independent risk factors for AKI. A risk prediction model, a traditional and a dynamic nomogram were developed based on the above factors. The area under the curve (AUC) of the ROC for predicting the risk of postoperative AKI was 0.803 (95% CI 0.769-0.836), with sensitivity and specificity of 84.9% and 63.4%, respectively. The calibration curve slope was close to 1, and the DCA showed that the model produced better clinical benefits when the probability threshold was set at 10%-82%. Conclusion(s): We developed a preoperative risk prediction model for AKI after heart valve replacement in patients with

normal renal function, which demonstrated satisfactory discrimination and calibration.Copyright 2025 Huang, Sun, Song, Wang, Liu and Zhang.

9. Dipeptidyl peptidase 4 inhibitors reduce the risk of adverse outcomes after acute kidney injury in diabetic patients.

Authors: Liao H.W.; Cheng C.Y.; Chen H.Y.; Chen J.Y.; Pan H.C.; Huang T.M. and Wu, V. C.

Publication Date: 2025

Journal: Clinical Kidney Journal 18(2) (pagination), pp. Article Number: sfae385. Date of Publication: 01 Feb 2025

Abstract: Background: Dipeptidyl peptidase 4 inhibitors (DPP4is) are considered safe for use in patients with diabetes mellitus and kidney dysfunction. We explored whether usage of DPP4 is in patients who recovered from dialysis-requiring acute kidney injury (AKI) could reduce the risk of future cardiac and kidney events. Method(s): We used the TriNetX platform to investigate whether the use of DPP4is in diabetes mellitus patients within 90 days of discharge from acute kidney disease could reduce the risk of all-cause mortality, major adverse kidney events (MAKEs), major adverse cardiovascular events (MACEs), and re-dialysis. The patients were followed for 5 years or until the occurrence of significant outcomes, with cohort data collected from 1 January 2016 to 30 September 2022. Result(s): The cohort utilizing DPP4 comprised 7348 patients with acute kidney disease, while the control group encompassed 229 417 individuals. After applying propensity score matching, 7343 patients (age 66.2 +/- 13.4 years; male, 49.9%) who used DPP4is showed a significant reduction in the risk of all-cause mortality [adjusted hazard ratio (aHR) 0.89; E-value 1.50, MAKEs (aHR 0.86; E-value 1.59), MACEs (aHR 0.91; E-value 1.44), and re-dialysis (aHR 0.73; E-value 2.10) after a median followup of 2.4 years. Conclusion(s): We demonstrated that in diabetes mellitus patients concurrently experiencing acute kidney disease, DPP4i usage could decrease the risk of mortality, MAKEs, MACEs, and re-dialysis. These findings emphasize the pivotal role of tailored treatment strategies involving DPP4i for acute kidney disease patients.Copyright © 2025 The Author(s) 2024. Published by Oxford University Press on behalf of the ERA

10. AKI in ACLF: navigating the complex therapeutic puzzle.

Authors: Maiwall R. and Sharma, F.

Publication Date: 2025

Journal: Expert Review of Gastroenterology and Hepatology 19(2), pp. 165–180

Abstract: Introduction: Acute kidney injury (AKI) in patients with acute-on-chronic liver failure (ACLF) is driven by the severity of systemic inflammation, acute portal hypertension driving circulatory dysfunction, hyperbilirubinemia, and toxicity of bile acids. The spectrum is mostly structural, associated with reduced response to vasoconstrictors. The progression is rapid, and need of renal replacement therapy and extracorporeal therapies may be required for the management. The development of renal failure is usually considered when defining the syndrome of ACLF. Areas covered: In the current review we discuss the pathophysiological basis, natural course, and response to the current therapeutic modalities and challenges in assessing and managing AKI in patients with ACLF. We conducted a comprehensive search of electronic databases such as PubMed, Web of Science, and Scopus using keywords like lactate, NGAL, and PHTN, as well as CRRT, PLEX, ACLF, and AKI phases for our review. Peer-reviewed English papers that addressed our issue were considered. Expert opinion: The difficulties and specific management strategies for AKI in ACLF patients are discussed emphasizing the importance of customized protocols, risk assessment guided by biomarkers, and investigation of extracorporeal therapies that target bile acids.Copyright © 2025 Informa UK Limited, trading as Taylor & Francis Group.

11. Long-term outcomes after AKI in hospitalized patients with COVID-19.

Authors: Marques da Silva B.;Gameiro J.;Lei Teixeira J.;Costa C.;Branco C.;Oliveira J.;Bernardo J.;Marques F.;Agapito Fonseca J. and Lopes, J. A.

Publication Date: 2025

Journal: Nefrologia 45(2), pp. 150–158

Abstract: Introduction and objectives: Acute kidney injury (AKI) is frequent in hospitalized patients and contributes to adverse short- and long-term outcomes. We aimed to evaluate the association of AKI and long-term adverse renal events and mortality in a cohort of patients hospitalized with COVID-19. Material(s) and Method(s): Single-center and retrospective study of hospitalized patients admitted to a Dedicated Unit for COVID-19 at Centro Hospitalar Universitario Lisboa Norte, Portugal, between March 2020 and October 2020. AKI was defined and classified according to the Kidney Disease: Improving Global Outcomes (KDIGO) classification, using SCr criteria. The analyzed outcomes were development of major adverse kidney events (MAKE), major adverse renal cardiovascular events (MARCE), and mortality over a two-year follow-up period. Result(s): From the included 409 patients, AKI occurred in 60.4% (n = 247). Within two years after discharge, 31.8% (n = 130) of patients had an eGFR Result(s): From the included 409 patients, AKI occurred in 60.4% (n = 247). Within two years after discharge, 31.8% (n = 130) of patients had an eGFR 2 and/or a 25% decrease on eGFR and 1.7% (n = 7) of patients required RRT, 6.1% (n = 25) of patients had CV events and 27.9% (n = 114) of patients died. The incidence of MAKE was 60.9% (n = 249), and MARCE was 62.6% (n = 256). On a multivariate analysis, older age (adjusted HR 1.02 (95% CI: 1.01-1.04), p = 0.008), cardiovascular disease (adjusted HR 2.22 (95% CI: 1.24-3.95), p = 0.007), chronic kidney disease (adjusted HR 5.15 (95% CI: 2.22-11.93), p and/or a 25% decrease on eGFR and 1.7% (n = 7) of patients required RRT, 6.1% (n = 25) of patients had CV events and 27.9% (n = 114) of patients died. The incidence of MAKE was 60.9% (n = 249), and MARCE was 62.6% (n = 256). On a multivariate analysis, older age (adjusted HR 1.02 (95% CI: 1.01-1.04), p = 0.008), cardiovascular disease (adjusted HR 2.22 (95% CI: 1.24-3.95), p = 0.007), chronic kidney disease (adjusted HR 5.15 (95% CI: 2.22-11.93), p and/or a 25% decrease on eGFR and 1.7% (n = 7) of patients required RRT, 6.1% (n = 25) of patients had CV events and 27.9% (n = 114) of patients died. The incidence of MAKE was 60.9% (n = 249), and MARCE was 62.6% (n = 256). On a multivariate analysis, older age (adjusted HR 1.02 (95% CI: 1.01-1.04), p = 0.008), cardiovascular disease (adjusted HR 2.22 (95% CI: 1.24-3.95), p = 0.007), chronic kidney disease (adjusted HR 5.15 (95% CI: 2.22-11.93), p and/or a 25% decrease on eGFR and 1.7% (n = 7) of patients required RRT, 6.1% (n = 25) of patients had CV events and 27.9% (n = 114) of patients died. The incidence of MAKE was 60.9% (n = 249), and MARCE was 62.6% (n = 256). On a multivariate analysis, older age (adjusted HR 1.02 (95% CI: 1.01-1.04), p = 0.008), cardiovascular disease (adjusted HR 2.22 (95% CI: 1.24-3.95), p = 0.007), chronic kidney disease (adjusted HR 5.15 (95% CI: 2.22-11.93), p Conclusion(s): In this cohort of hospitalized patients with COVID-19, AKI was independently associated with the risk of long-term need for dialysis and/or renal function decline and/or mortality after hospital discharge.Copyright © 2024 Sociedad Espanola de Nefrologia

12. Risk of and Mortality After Acute Kidney Injury Following Cancer Treatment: A Cohort Study.

Authors: Munch P.V.; Norgaard M.; Jensen S.K.; Birn H.; Schmidt H. and Christiansen, C. F.

Publication Date: 2025

Journal: Cancer Medicine 14(3) (pagination), pp. Article Number: e70646. Date of Publication: 01 Feb 2025

Abstract: Background: Acute kidney injury (AKI) can be a severe complication in cancer patients. However, uncertainty remains regarding the risk of and prognosis after AKI following cancer treatments. We therefore aimed to examine the risk of and mortality after AKI following a wide range of specific cancer treatments, including surgical procedures, anticancer drugs, and hematopoietic stem cell transplantations (HSCTs). Method(s): We conducted a nationwide population-based cohort study. We included adult patients receiving cancer treatment in Denmark from 2010 to 2024. We calculated the risk of AKI within 7 days after surgeries, 1 year after initiation of anticancer drugs, and 100 days after HSCTs. Furthermore, we examined the 1-year mortality in patients with and without AKI following cancer treatment. Result(s): We identified 357,870 cancer patients. The 7-day risk of AKI after surgery ranged from 0.3% (breast cancer surgery) to 68.9% (radical nephrectomy in kidney cancer) while the 1-year risk following anticancer drug treatment ranged from 3.5% (cyclophosphamide in breast cancer) to 79.3% (all drugs in acute lymphatic leukemia). The 100-day AKI risk following HSCT ranged from 20.7% (multiple myeloma) to 81.8% (leukemia). For most treatments, AKI was associated with a higher 1-year hazard ratio and risk of death, with exceptions including radical nephrectomy in kidney cancer. Conclusion(s): In conclusion, several cancer treatments were associated with a high risk of AKI, and AKI was associated with increased mortality in most treatments. These findings highlight the prognostic value of assessing kidney function following specific cancer treatments in clinical practice.Copyright © 2025 The Author(s). Cancer Medicine published by John Wiley & Sons Ltd.

13. Perspectives and Experiences of Patients with Acute Kidney Injury: a Systematic Review.

Authors: Natale P.;Wu R.;Hughes A.;Sluiter A.;Rubenstein D.A.;Zappitelli M.;Povoa P.;Morris A.C.;O'Connor J.;TeixeiraPinto A.;Strippoli G. and Jaure, A.

Publication Date: 2025

Journal: Clinical Journal of the American Society of Nephrology (pagination)

Abstract: Background: Acute kidney injury (AKI) is associated with higher risk of mortality and progression to chronic kidney disease. The challenges and uncertainty in the diagnosis, selfmanagement, and prevention of AKI can be distressing for patients. We aimed to perform a systematic review of qualitative studies/surveys that reported the perspectives and experiences of adults with AKI. Method(s): We searched MEDLINE, Embase, PsycINFO, and CINAHL from inception to the 17th of January 2024. Thematic textual analysis was used to synthesize the findings. Result(s): We included 20 studies (10 qualitative studies, 10 surveys) involving 867 participants. We identified six themes: navigating the unknown (an unexpected and unfamiliar diagnosis; tossed about in a fragmented system: dismissed and vulnerable at discharge); impaired life participation, relationships and wellbeing (limiting ability to do daily activities; straining relationships); unbearable and unsustainable treatment burden (adding strain on family members; financial pressure due to medical expenses; cumulative stress of ongoing monitoring); uncertain if recovery is attainable (possible permanence of kidney damage; fear about nephrotoxic medications; terrified on the need for dialysis); less consequential than other health priorities (short-term and reversible; prioritizing other comorbidities and conditions); and empowered in managing own health (focusing on optimizing kidney health; gaining confidence in selfmanagement; reassured with social and clinical support). CONCLUSIONs: Patients may be unaware of their AKI diagnosis and prognosis, feel that care is fragmented, and burdened by treatment. Providing education, alleviating treatment burden, and implementing a comprehensive model of care may help to address the needs of patients with AKI leading to better outcomes.Copyright © 2025 by the American Society of Nephrology.

14. Impact of mechanical ventilation on severe acute kidney injury in critically ill patients with and without COVID-19 - a multicentre propensity matched analysis.

Authors: Perschinka F.; Mayerhofer T.; Engelbrecht T.; Graf A.; Zajic P.; Metnitz P. and Joannidis, M.

Publication Date: 2025

Journal: Annals of Intensive Care 15(1) (pagination), pp. Article Number: 17. Date of Publication: 01 Dec 2025

Abstract: Background: Acute kidney injury (AKI) is common in critically ill patients and is associated with increased morbidity and mortality. Its complications often require renal replacement therapy (RRT). Invasive mechanical ventilation (IMV) and infections are considered risk factors for the occurrence of AKI. The use of IMV and non-invasive ventilation (NIV) has changed over the course of the pandemic.

Concomitant with this change in treatment a reduction in the incidences of AKI and RRT was observed. We aimed to investigate the impact of IMV on RRT initiation by comparing critically ill patients with and without COVID-19. Furthermore, we wanted to investigate the rates and timing of RRT as well as the outcome of patients, who were treated with RRT. Result(s): A total of 8,678 patients were included, of which 555 (12.8%) in the COVID-19 and 554 (12.8%) in the control group were treated with RRT. In the first week of ICU stay the COVID-19 patients showed a significantly lower probability for RRT initiation (day 1: p Result(s): A total of 8,678 patients were included, of which 555 (12.8%) in the control group were treated with RRT. In the first week of ICU stay the COVID-19 and 554 (12.8%) in the control group were treated with RRT. In the first week of ICU stay the COVID-19 and 554 (12.8%) in the control group were treated with RRT. In the first week of ICU stay the COVID-19 and 554 (12.8%) in the control group were treated with RRT. In the first week of ICU stay the COVID-19 patients showed a significantly lower probability for RRT initiation (day 1: p Conclusion(s): The analysis demonstrated that IMV as well as COVID-19 are associated with an increased risk for initiation of RRT. The association between IMV and risk of RRT initiation was given for all investigated time intervals. Additionally, COVID-19 patients showed an increased risk for RRT initiation during the entire ICU stay within patients admitted to an ICU due to respiratory disease. In COVID-19 patients treated with RRT, the risk of death was significantly higher compared to non-COVID-19 patients.Copyright © The Author(s) 2025.

15. How Would We Prevent Our Own Acute Kidney Injury After Cardiac Surgery?.

Authors: Pruna A.; Monaco F.; Asiller O.O.; Delrio S.; Yavorovskiy A.; Bellomo R. and Landoni, G.

Publication Date: 2025

Journal: Journal of Cardiothoracic and Vascular Anesthesia (pagination), pp. Date of Publication: 2025

Abstract: Acute Kidney Injury (AKI) is a common complication after cardiac surgery affecting up to 40% leading to increased morbidity and mortality. To date, there is no specific treatment for AKI, thus, clinical research efforts are focused on preventive measures. The only pharmacological preventive intervention that has demonstrated a beneficial effect on AKI in a high-guality, double-blind. randomized controlled trial is a short perioperative infusion of a balanced mixture of amino acid solution. Amino acid infusion reduced the incidence of AKI by recruiting renal functional reserve and, therefore, increasing the glomerular filtration rate. The beneficial effect of amino acids was further confirmed for severe AKI and applied to patients with chronic kidney disease. Among nonpharmacological interventions, international guidelines on AKI suggest the implementation of a bundle of good clinical practice measures to reduce the incidence of perioperative AKI or to improve renal function whenever AKI occurs. The Kidney Disease Improving Global Outcomes (KDIGO) bundle includes the discontinuation of nephrotoxic agents, volume status and perfusion pressure assessment, renal functional hemodynamic monitoring, serum creatine, and urine output monitoring, and the avoidance of hyperglycemia and radiocontrast procedures. However, pooled data from a meta-analysis did not find a significant reduction in AKI. The aim of this review is to delineate the most appropriate evidence-based approach to prevent AKI in cardiac surgery patients.Copyright © 2025 Elsevier Inc.

16. Incidence and Predictors of Acute Kidney Injury Following Advanced Ovarian Cancer Cytoreduction at a Tertiary UK Centre: An Exploratory Analysis and Insights from Explainable Artificial Intelligence.

Authors: Ratcliffe E.;Devlin C.;Munot S.;Broadhead T.;Thangavelu A.;Quaranta M.;Nugent D.;Kalampokis E.;De Jong D. and Laios, A.

Publication Date: 2025

Journal: Current Oncology 32(2) (pagination), pp. Article Number: 73. Date of Publication: 01 Feb 2025

Abstract: Background/Objectives: The incidence of acute kidney injury (AKI) following advanced epithelial ovarian cancer (EOC) surgery has not been extensively studied. This study aimed to investigate the incidence of AKI and identify preoperative and intraoperative predictors in patients undergoing advanced EOC cytoreduction using both traditional statistics and Artificial Intelligence (AI)

modelling. Method(s): Retrospective data were collected for 134 patients with a suspected or confirmed diagnosis of advanced EOC (FIGO Stage III-IV) who underwent surgical cytoreduction between January 2021 and December 2022 at a UK tertiary referral centre. AKI was diagnosed according to the KDIGO criteria. Data on 22 patient variables were extracted, including age, Charlson Comorbidity Index (CCI), procedure length, surgical complexity, and length of hospital stay. Logistic regression analysis was used for feature selection to identify AKI predictors, and an extreme gradient boost (XGBoost) model was applied to all variables related to AKI events. Result(s): The incidence of postoperative AKI was 6.72% ((Formula presented.)). Predictive factors for AKI included younger age (OR = 0.942, (Formula presented.)), lower CCI (OR = 0.415, (Formula presented.)), longer procedure duration (OR = 1.006, (Formula presented.)), and greater surgical effort (OR = 1.427, (Formula presented.)). Patients with perioperative AKI experienced a doubling in the length of hospital stay ((Formula presented.)). Mortality rates were similar between patients with and without AKI. Al-driven algorithms highlighted the complexity of AKI prediction and provided individual risk profiles, enabling future stratification and prompting different frequencies of AKI monitoring following cytoreduction. Conclusion(s): Predicting AKI is a complex task. This study found a lower-than-expected incidence of AKI following advanced EOC cytoreductive surgery. AKI is linked to heightened surgical risk-taking, underscoring the need for improved guidelines focusing on postoperative monitoring for targeted patients. Artificial Intelligence offers the potential for personalized AKI prediction. Copyright © 2025 by the authors.

17. The role of sex and gender in acute kidney injury-consensus statements from the 33rd Acute Disease Quality Initiative.

Authors: Soranno D.E.;Awdishu L.;Bagshaw S.M.;Basile D.;Bell S.;Bihorac A.;Bonventre J.;Brendolan A.;ClaureDel Granado R.;Collister D.;Curtis L.M.;Dolan K.;Fuhrman D.Y.;Habeeb Z.;Hutchens M.P.;Kashani K.B.;Lumlertgul N.;McCulloch M.;Menon S.;Mohamed A., et al

Publication Date: 2025

Journal: Kidney International 107(4), pp. 606–616

Abstract: Sex differences exist in acute kidney injury (AKI), and the role that sex and gender play along the AKI care continuum remains unclear. The 33rd Acute Disease Quality Initiative meeting evaluated available data on the role of sex and gender in AKI and identified knowledge gaps. Data from experimental models, pathophysiology, epidemiology, clinical care, gender, social determinants of health, education, and advocacy were reviewed. Recommendations include incorporating sex and gender into research along the bench-to-bedside spectrum; analyzing sex-stratified results; evaluating the effects of sex chromosomes, hormones, and gender on outcomes; considering fluctuations of hormone levels; studying the impact gender may have on access to care; and developing educational tools to inform patients, providers, and stakeholders. This meeting report summarizes what is known about sex and gender along the AKI care continuum and proposes an agenda for translational discovery to elucidate the role of sex and gender in AKI across the lifespan.Copyright © 2025 International Society of Nephrology

18. Epidemiological risk factors for acute kidney injury outcomes in hospitalized adult patients: a multicenter cohort study.

Authors: Takeuchi T.;Rahman A.K.M.F.;Ghazi L.;Moe O.W.;Toto R.D.;Siew E.D.;Neyra J.A. and Gutierrez, O. M.

Publication Date: 2025

Journal: Clinical Kidney Journal 18(2) (pagination), pp. Article Number: sfae426. Date of Publication: 01 Feb 2025

Abstract: Background. Multiple studies have identified risk factors for acute kidney injury (AKI) in hospitalized patients, but less is known about factors associated with AKI severity, including non-

recovery of AKI. Methods. Retrospective cohort study of adults (>=18 years) hospitalized between 2014 and 2017 at three US academic medical centers. Study outcomes included incidence of AKI and non-recovery from AKI at hospital discharge in those who survived hospitalization. AKI was defined by KDIGO serum creatinine criteria. Non-AKI recovery was defined as persistent AKI stage >=1 at time of discharge. Multivariable models assessed the association of risk factors for each outcome, focusing on race, diabetes, and obesity (BMI >= 30 versus 2), and adjusting for potential confounders. Results. Among 56 056 patients included in the study (mean age 57, 25% Black, 48% women), 12 954 (23%) developed AKI. In adjusted models, Black race [odds ratio (OR) 1.26, 95% confidence interval (CI): 1.20, 1.32], diabetes (OR 1.14, 95% CI: 1.08, 1.19) and obesity (OR 1.14, 95% CI: 1.10, 1.20) were all associated with incident AKI. A total of 3591 of the 11 672 (30.8%) patients with AKI who survived until discharge had AKI non-recovery. In adjusted models, obesity (OR 1.27, 95% CI: 1.17, 1.39) was independently associated with higher risk of AKI non-recovery at hospital discharge. Conclusions. Black race, diabetes, and obesity were associated with the development of AKI in hospitalized patients, but only obesity was associated with non-recovery from AKI at hospital discharge. These findings emphasize the growing relevance of obesity as an epidemiological risk factor of AKI.Copyright © The Author(s) 2025. Published by Oxford University Press on behalf of the ERA.

19. Legionnaire's Disease Beyond the Lungs: A Rare Case of Severe Rhabdomyolysis and Acute Kidney Injury from a Possible Vaping Source.

Authors: Wells D.A. and Eick, J.

Publication Date: 2025

Journal: Hospital Pharmacy (pagination), pp. Date of Publication: 2025

Abstract: Legionnaires' disease (LD), caused by Legionella pneumophila, often presents with pneumonia, gastrointestinal symptoms, and confusion. Severe LD can lead to a triad of pneumonia, rhabdomyolysis, and acute kidney injury (AKI), with less common complications such as liver injury. We report a case of a 32-year-old male with no prior medical history who presented with LD complicated by severe rhabdomyolysis, AKI requiring hemodialysis (HD), and acute liver injury. The patient reported 6 days of gastrointestinal symptoms, reduced mobility, and minimal urine output. The patient also reported a history of vaping. Diagnostic imaging revealed pneumonia and enterocolitis, while laboratory findings included leukocytosis, hyponatremia, significantly elevated creatinine kinase (201 000 U/L), and acute transaminitis. A positive Legionella urine antigen confirmed the diagnosis. Initial treatment with azithromycin for 7 days showed partial improvement; however, clinical and laboratory deterioration necessitated a switch to levofloxacin for an additional 7 days. This case highlights rare, severe multiorgan involvement in LD, with rhabdomyolysis and AKI being particularly pronounced. The possible association between vaping and Legionella infection is explored, given the patient's history of vaping and limited prior documentation of such a link. Prompt recognition, accurate diagnosis, and escalation of therapy are critical in managing severe LD and reducing associated morbidity.Copyright © The Author(s) 2025.

20. Acute kidney injury as a key predictor of cardiovascular events in chronic kidney disease patients: the CKD-REIN study.

Authors: Florens N.;Aymes E.;Gauthier V.;Frimat L.;Laville M.;Bedo D.;Beaudrey T.;Amouyel P.;Mansencal N.;Lange C.;Liabeuf S.;Massy Z.A.;Stengel B.;de Pinho N.A. and Hamroun, A.

Publication Date: 2024

Journal: Clinical Kidney Journal 17(12) (pagination), pp. Article Number: sfae337. Date of Publication: 01 Dec 2024

Abstract: Background and Hypothesis. Cardiovascular diseases are a leading cause of morbidity and mortality in patients with chronic kidney disease (CKD). Acute kidney injury (AKI) has been increasingly recognized as a potential exacerbating factor for cardiovascular events in these patients. The CKD-

REIN study aims to explore the relationship between AKI and the risk of major adverse cardiovascular events (MACE) in a cohort of CKD patients. We hypothesize that AKI is a significant and independent predictor of MACE in patients with CKD, and that the severity of AKI correlates with the risk of subsequent cardiovascular events. Methods. This prospective cohort study included 3033 adult CKD patients from 40 outpatient nephrology clinics in France. Patients were followed for a median of 5.2 years. AKI episodes were identified and staged based on the KDIGO-AKI criteria. Cardiovascular events, including myocardial infarction, stroke, heart failure hospitalization, and cardiovascular death, were systematically recorded. The association between AKI and MACE was analyzed using a multivariable Cox model, adjusting for confounders such as demographic characteristics, medical history, and baseline kidney function. Results. During the follow-up, 530 patients experienced at least one episode of AKI. The cumulative incidence of MACE at 1 year post-AKI was 8.1%. Patients with AKI had a significantly increased risk of MACE, with an adjusted hazard ratio (HR) of 5.78 (P Copyright © The Author(s) 2024. Published by Oxford University Press on behalf of the ERA.

21. Incidence, Clinical Characteristics and Outcomes Associated with Acute Kidney Injury in Patients Hospitalized with COVID-19.

Authors: Maharjan K.;Bajracharya M.;Sharma Chalise B.;Balla P.;Adhikari S.;Shrestha S.;Baral B.;Neupane J.;Poudel M. and Bastola, A.

Publication Date: 2024

Journal: Journal of Nepal Health Research Council 22(3), pp. 470–476

Abstract: BACKGROUND: Acute kidney Injury associated with Coronavirus disease COVID-19 appeared to negatively influence clinical outcomes and is found to be associated with significant risk of death. This retrospective study aimed to describe the incidence of Acute Kidney Injury, its associations with clinical characteristics and outcomes among COVID-19 patients in Sukraraj Tropical and Infectious Disease Hospital, a tertiary infectious disease hospital in Nepal. METHOD(S): A cross-sectional study was done where. Medical and lab records of reverse transcriptase Polymerase chain reaction positive COVID-19 inpatients, admitted between April 2021 to July 2021 were reviewed. It represented the second wave of wave of coronavirus pandemic caused by the delta strain. Patients aged less than 18 years, pregnant females and patients with known chronic kidney disease were excluded Results: Of 393 admissions, 83 (21.1%) patients developed Acute Kidney Injury. Characteristics found to have significant association with development of AKI was age (p METHOD(S): A cross-sectional study was done where. Medical and lab records of reverse transcriptase Polymerase chain reaction positive COVID-19 inpatients, admitted between April 2021 to July 2021 were reviewed. It represented the second wave of wave of coronavirus pandemic caused by the delta strain. Patients aged less than 18 years, pregnant females and patients with known chronic kidney disease were excluded Results: Of 393 admissions, 83 (21.1%) patients developed Acute Kidney Injury. Characteristics found to have significant association with development of AKI was age (p METHOD(S): A cross-sectional study was done where. Medical and lab records of reverse transcriptase Polymerase chain reaction positive COVID-19 inpatients, admitted between April 2021 to July 2021 were reviewed. It represented the second wave of wave of coronavirus pandemic caused by the delta strain. Patients aged less than 18 years, pregnant females and patients with known chronic kidney disease were excluded Results: Of 393 admissions, 83 (21.1%) patients developed Acute Kidney Injury. Characteristics found to have significant association with development of AKI was age (p METHOD(S): A cross-sectional study was done where. Medical and lab records of reverse transcriptase Polymerase chain reaction positive COVID-19 inpatients, admitted between April 2021 to July 2021 were reviewed. It represented the second wave of wave of coronavirus pandemic caused by the delta strain. Patients aged less than 18 years, pregnant females and patients with known chronic kidney disease were excluded Results: Of 393 admissions, 83 (21.1%) patients developed Acute Kidney Injury. Characteristics found to have significant association with development of AKI was age (p METHOD(S); A cross-sectional study was done where. Medical and lab records of reverse transcriptase Polymerase chain reaction positive COVID-19 inpatients, admitted between April 2021 to July 2021 were reviewed. It represented the second wave of wave of coronavirus pandemic caused by the delta strain. Patients aged less than 18 years, pregnant females and patients with known chronic kidney disease were excluded Results: Of

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Sources Used:

The following databases are used in the creation of this bulletin: EMBASE and Medline.

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