3 - Clinical Anatomy

PO-045 - (23982) - IMPACT OF CHRONIC KIDNEY DISEASE STAGES ON IN-HOSPITAL OUTCOMES FOLLOWING TOTAL JOINT ARTHROPLASTY

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None

Chronic kidney disease (CKD) has been associated with adverse outcomes following total joint arthroplasty (TJA), though less is known about the specific risks associated with each CKD stage. This study aims to evaluate the impact of CKD stage on in-hospital postoperative outcomes after TJA.

Data were obtained from the National Inpatient Sample (NIS) spanning 2006 to 2016. ICD-9 codes were used to identify postoperative inpatient TJA outcomes. An unweighted multivariable logistic regression analysis, adjusted for race, sex, age, and year, was performed, to compare outcomes across various CKD stages relative to a control group without CKD. Evaluated outcomes included: any complication, central nervous system (CNS) complications, cardiac complications, deep vein thrombosis (DVT), genitourinary (GU) complications, hematoma, infection, wound dehiscence, and postoperative anemia.

Patients with CKD stage 4 group had the highest odds of experiencing any complication ($p<0.0001$), cardiac complications ($p<0.0001$), DVT ($p<0.0001$), infection ($p<0.0001$), and anemia ($p<0.0001$). Stage 5 CKD had the highest significant risk of CNS ($p=0.0010$) and GU ($p=0.0028$) complications.

Advanced CKD stages tended to have higher rates of complications after TJA. Interestingly, CKD stage 5 patients showed lower odds of several complications compared to those with stage 4, possibly reflecting selection bias favoring more rigorously optimized dialysis patients. These findings highlight the importance of thorough preoperative optimization in this high risk population.

Palavras-chave : CKD, TJA, Postoperative outcomes