



Risk Predictors Analysis That Impact Long-term Outcomes in Patients with Chronic Kidney Disease Undergoing Coronary Artery Bypass Grafting.

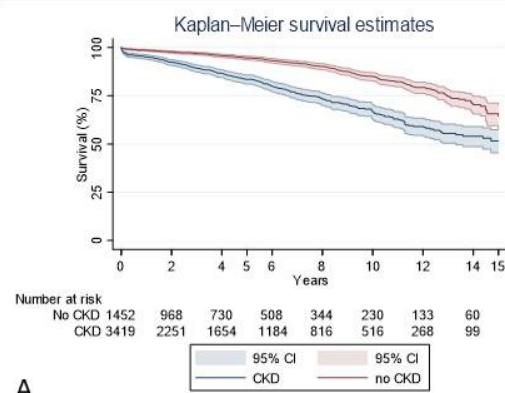
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BACKGROUND

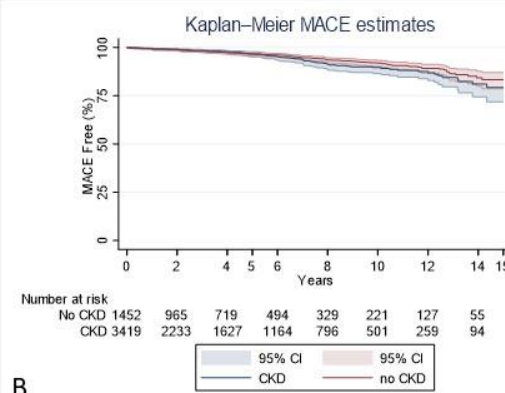
To identify periprocedural risk predictors that influences long-term prognosis in patients with chronic kidney disease (CKD) undergoing isolated coronary artery bypass grafting (CABG).

METHODS

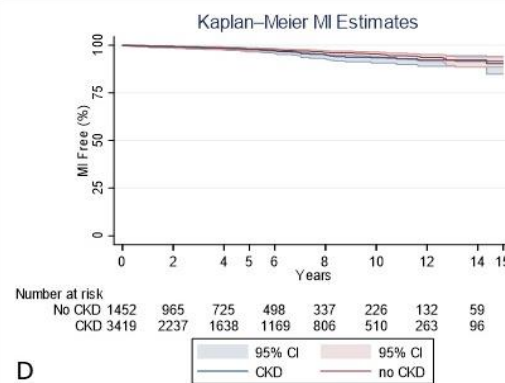
All 4,871 consecutive patients undergoing isolated CABG between May 2005 and June 2021 were included in the study. Patients with and without CKD were compared for baseline demographics and pre-operative characteristics. A propensity-adjusted analysis was used to compare the two groups. Primary outcome was long-term incidence of all-cause death.



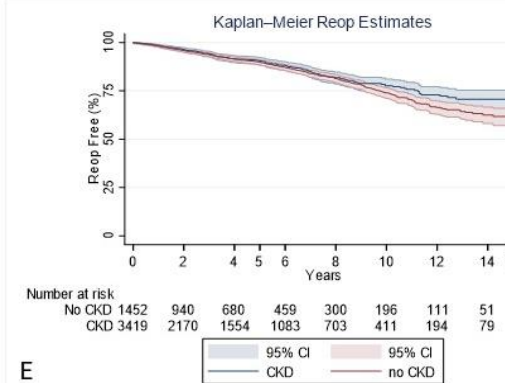
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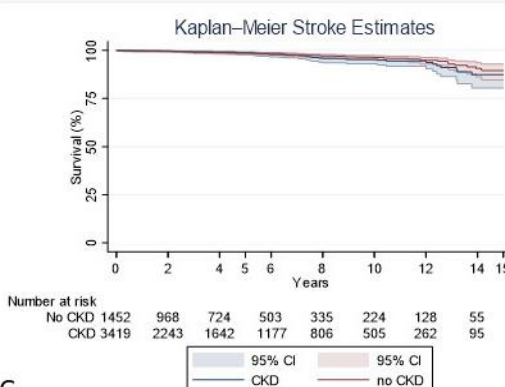
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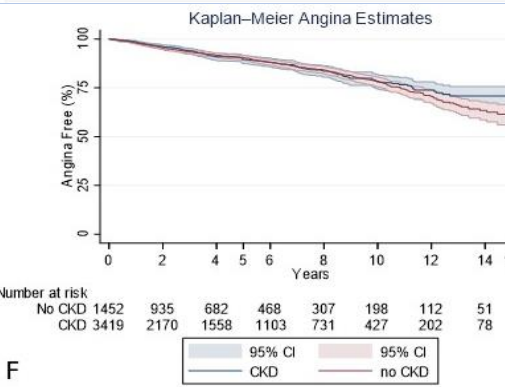
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RESULTS

Pre-operatively, 1,452 patients were included in the CKD group and 3,419 in the non-CKD group. Mean follow-up time was 4 years. Postoperatively, CKD patients had higher incidence of intensive care unit and hospital stay and 30-day all-cause mortality compared to non-CKD patients. All-cause death incidence was 297 (20.4%) vs 266 (7.8%), $p < 0.001$, (HR 1.5 [1.2, 1.9]) in patients with and without CKD. MACCE did not differ among the two groups. Most common cause of death was non-cardiac related. Peri-procedural risk predictors for all-cause death in the CKD cohort were male gender, white race, diabetes, $\text{STS} \geq 4\%$, dialysis, chronic obstructive pulmonary disease, peripheral vascular disease, ejection fraction $< 50\%$, and pre-operative atrial fibrillation (Afib).

CONCLUSION

Patients with CKD undergoing isolated CABG had a significantly higher incidence of all-cause death compared to those without CKD. Risk predictors for long-term all cause death in the CKD cohort included the presence of pre-operative Afib.