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ASSOCIATION OF HIGH AND LOW DENSITY LIPOPROTEINS (HDL AND LDL) WITH ALL-CAUSE MORTALITY IN PERITONEAL DIALYSIS PATIENTS

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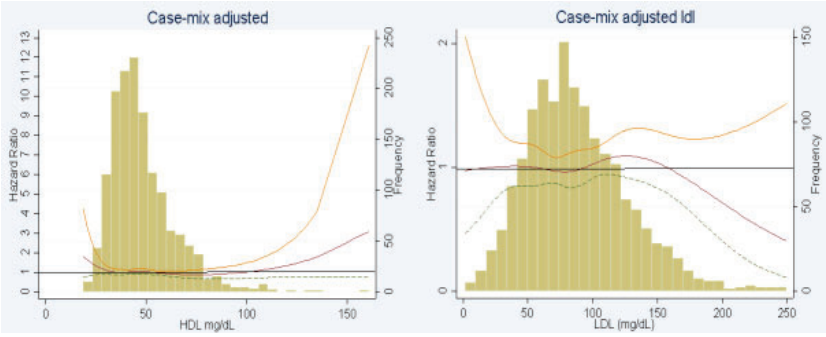
Previous studies have reported on a “lipid paradox” for hemodialysis (HD) patients, where associations of lipids with mortality are reverse or non-significant compared to what is found in the general population. The lipoprotein profile and patho-physi-ology of dyslipidemia in peritoneal dialysis (PD) are different from HD and the general population. The data on the associations of LDL and HDL with mortality in PD patients are limited.

We examined the association of LDL and HDL separately with all-cause mortality among 1,440 PD only patients followed for up to 2 years (2004-2006). We use restricted cubic splines of Cox proportional hazard models with case-mix multivariable adjustment to illustrate the associations.

Patients were 58±15 years old and included 46% women, 18% blacks, and 50% diabetics. Using 3 degrees of freedom, plots demonstrate non-significant associations of both increasing levels of HDL or LDL with all-cause mortality. Patients with HDL>100 mg/dL demonstrated a non-significant trend of increased death risk, while patients with LDL>160 m/dL showed a non-significant trend of higher mortality.



In conclusion, in PD patients, the association of LDL and HDL levels with mortality appears different from the general population, similar to that described in HD patients in spite of the potential differences in pathophysiology between the two conditions.