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Permalink

<https://escholarship.org/uc/item/5m6941tg>

Journal

AMERICAN JOURNAL OF KIDNEY DISEASES, 63(5)

ISSN

0272-6386

Authors

Steiner, Shah
Streja, Elani
Rhee, Connie M
[et al.](#)

Publication Date

2014

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Peer reviewed

A105

Am J Kidney Dis. 2014;63(5):A1-A121

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ASSOCIATION BETWEEN CHANGE IN TRIGLYCERIDES OVER TIME AND MORTALITY AMONG INCIDENT HEMODYALYSIS PATIENTS: Shah Steiner¹;

Elani Streja¹; Connie M. Rhee¹; Hamid Moradi¹; Csaba P. Kovesdy²; Kamyar Kalantar-Zadeh¹ ¹Harold Simmons Center, UC Irvine Medical Center, Orange, CA; ²Division of Nephrology, University of Tennessee, Memphis, TN.

Although increasing triglycerides (TG) has been directly associated with increased risk of death in the general population, an inverse or non-significant association has been found in maintenance hemodialysis (MHD) patients. However, studies on change in TG levels over time and its effect of mortality have not been examined in MHD patients. We hypothesize that decreasing TG levels over time are associated with increased risk of mortality.

We examined the risk of death in subsequent quarter given change in triglyceride from baseline levels in a 1.5-year/6 quarter (July 2004-December 2005) cohort of 9,318 incident MHD patients. We reported means and standard deviations of triglyceride levels per patient quarter stratified by death in subsequent quarter. We additionally used cox proportional hazards regression models adjusted for baseline triglyceride levels, case-mix and markers of malnutrition-inflammation complex for estimate risk of death for each 10 unit decrease in triglyceride per quarter over 6 quarters.

Patients were age 63±15 years old, 45% female, 29% black, and 64% diabetics. For each quarter, patients who died in the subsequent quarter had a significantly larger decrease in TG compared to those patients who survived into the subsequent quarter. In fully adjusted models, each 10 unit decrease in TG per quarter was associated with a 2% increased risk of death (HR, 1.02; 95% CI, 1.01-1.03).

Hence, decreasing TG from baseline over time is associated with a modest but significant increased risk of death in MHD patients, even after adjustment for MICS. Further studies are required to understand the significance and/or reasons for this relationship.

