POSTER PRESENTATION

Open Access

Acute mesenteric ischemia and outcomes in ICU survivors

SL Gans¹, FK Gibbons², MA Boermeester¹, KB Christopher^{3*}

From ESICM LIVES 2015 Berlin, Germany. 3-7 October 2015

Introduction

Acute Mesenteric Ischemia is associated with substantial in-hospital mortality. It is not known if Acute Mesenteric Ischemia is risk factor for outcomes in ICU survivors.

Objectives

We hypothesized that ICU patients with Acute Mesenteric Ischemia who survive hospitalization would be at high risk for adverse events following discharge.

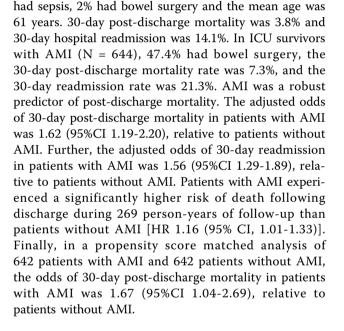
Methods

We performed a two center observational study of patients treated in medical and surgical intensive care units in Boston, Massachusetts. We studied 82,583 patients, aged \geq 18 years, who received critical care between 1997 and 2012 and survived to hospital discharge. The exposure of interest was Acute Mesenteric Ischemia (AMI) defined as an ICD-9 code of vascular insufficiency of intestine (ICD-9 557) during the hospitalization. The primary outcome was 30-day post-discharge mortality determined by the US Social Security Death Master File. Secondary outcome was unplanned 30 day hospital readmission. Adjusted odds ratios were estimated by multivariable logistic regression models with inclusion of terms for gender and the Acute Organ Failure score (1), a validated ICU risk-prediction score inclusive of terms for age, race, comorbidity, patient type (surgical vs medical), sepsis and acute organ failure. Mortality was also analyzed with a risk-adjusted Cox proportional hazards regression model.

Results

In the cohort of ICU survivors (N = 82,583) 58% were men, 80% were white, 51% were surgical patients, 10%

³Brigham and Women's Hospital, Renal Division, Boston, MA, USA Full list of author information is available at the end of the article



Conclusions

Acute Mesenteric Ischemia patients are among a highrisk group of critically ill survivors. Acute Mesenteric Ischemia is a robust predictor of post hospital discharge mortality and hospital readmission in survivors of critical care.

Authors' details

¹Academic Medical Centre, Surgery Department, Amsterdam, the Netherlands. ²Massachusetts General Hospital, Pulmonary and Critical Care Medicine, Boston, MA, USA. ³Brigham and Women's Hospital, Renal Division, Boston, MA, USA.

Published: 1 October 2015



© 2015 Gans et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http:// creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Reference

 Elias KM, Morromizato T, Gibbons FK, Christopher KB: Derivation and validation of the acute organ failure score to predict outcome in critically ill patients: a cohort study. Crit Care Med 2015, 43(4):856-864.

doi:10.1186/2197-425X-3-S1-A537

Cite this article as: Gans *et al.*: Acute mesenteric ischemia and outcomes in ICU survivors. Intensive Care Medicine Experimental 2015 3(Suppl 1):A537.

Submit your manuscript to a SpringerOpen[™] journal and benefit from:

- ► Convenient online submission
- ► Rigorous peer review
- Immediate publication on acceptance
- Open access: articles freely available online
- ► High visibility within the field
- ► Retaining the copyright to your article

Submit your next manuscript at ► springeropen.com