Nationwide database-based observational study did not support an association between early thiamine administration after admission and the 28-day mortality in patients with septic shock.

Title
Association Between IV Thiamine and Mortality in Patients With Septic Shock: A Nationwide Observational Study

Objective
To examine the effect of thiamine administration on mortality in patients with septic shock requiring norepinephrine.

Design
Retrospective observational cohort study from July 2010 to March 2017.

Setting
More than 1,000 acute care hospitals covering approx. 90% of all tertiary care emergency hospitals in Japan.

Patients
Patients with septic shock requiring norepinephrine within 2 days of admission were retrospectively reviewed.

Intervention
Patients who received greater than or equal to 100 mg of thiamine within 2 days of admission were included in the thiamine group, and those who did not were included in the control group.

Results

- 68,571 Eligible Patients
- 49,791 Control
- 18,780 Thiamine

- 10,143 (54.1%) 100mg/day
- 7,679 (40.9%) 200mg/day

0.2% 28 Day Mortality Adjusted Risk difference
Thiamine vs control, 0.2% (-0.5 - 0.9)

0.6% 28 Day Mortality Adjusted Risk difference
100mg vs control, 0.6% (-0.3 - 1.4)

-0.3% 28 Day Mortality Adjusted Risk difference
200mg vs control, -0.3% (-1.3 - 0.8)

Data from Miyamoto Y, et al: Crit Care Med, 2020

ccmjournall.org
#CritCareMed