

中文題目：急性心肌梗塞病人的脂質悖論：營養不良的影響

英文題目：Lipid Paradox in Patients with Acute Myocardial Infarction:  
Potential Impact of Malnutrition

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**Background:** Aggressive lipid reduction is recommended for patients with AMI, but reverse epidemiology, the lipid paradox, has been reported in several clinical studies. The cause of lipid paradox remains uncertain, and nutrition is one possible explanation. In this single-center retrospective study, we investigated the relationships between baseline LDL concentrations and clinical outcomes in patients with AMI, stratified by different nutritional status.

**Methods:** Totally 409 patients were enrolled for analysis. The Nutritional Risk Index (NRI) was used to estimate the risk of malnutrition. Subjects were grouped into tertiles according to their NRIs. Clinical outcomes were compared among patients with varying NRIs and LDL levels.

**Results:** Patients in the lowest NRI tertile had increased incidences of in-hospital mortality, cardiogenic shock, decompensated heart failure, renal failure, and sepsis. This tertile was also associated with increased long-term mortality during the follow-up period (mean duration, 832 ±744 days). Mortality was increased among patients with baseline LDL concentrations ≤70 mg/dL in the lowest NRI tertile (log rank test,  $p=0.0257$ ), but not in the high or median tertiles. In addition, baseline LDL level ≤70mg/dL was an independent risk factor of all-cause mortality (adjusted hazard ratio=1.73; 95% confidence interval, 1.01–2.94;  $p=0.045$ ) in the lowest NRI tertile.

**Conclusions:** Lipid paradox was observed in the high-risk of malnutrition population among patients with AMI. Aggressive lipid-lowering therapy is still recommended for patients with AMI and fair nutritional status. However, when treating patients at high risk of malnutrition, the improvement of nutritional status may be more beneficial than strict LDL control.

**Keywords:** lipid paradox; low-density lipoprotein; malnutrition; acute myocardial infarction