Persistence of Mortality Risk in Patients With Acute Cardiac Diseases and Mild Thyroid Dysfunction.


From the Clinical Physiology Institute (sm, gi, vl, pl, vs, fm, ap), National Council Research; Scuola Superiore Sant’Anna (al), Pisa, Italy; and Fondazione G. Monasterio (mc), National Council Research, Regione Toscana.

Abstract

INTRODUCTION: There are no studies on the long-term prognostic role of abnormal thyrotropin value in patients with acute cardiac diseases. Aim of the study was to assess the incidence and persistence of risk of cardiac and overall deaths in patients with acute cardiac diseases.

METHODS: A total of 1026 patients (mean age: 67.7 years) were divided into 4 groups: (1) euthyroid (EU, n = 579); (2) subclinical-like hypothyroidism (SLHYPO, n = 68); (3) subclinical-like hyperthyroidism (SLHYPER, n = 23) and (4) low-triiodothyronine syndrome (LowT3, n = 356). Follow-up started from the day of thyroid hormone evaluation (mean follow-up: 30 months). The events considered were cardiac and overall deaths.

RESULTS: Survival rate for cardiac death was lower in SLHYPO and in LT3 than in EU (log rank test; $\chi^2 = 33.6; P < 0.001$). Survival rate for overall death was lower in SLHYPO, SLHYPER and LowT3 than in EU ($48.3; P < 0.001$).

After adjustment for several risk factors, the hazard ratio for cardiac death was higher in SLHYPO (3.65; $P = 0.004$) in LowT3 (1.88; $P = 0.032$) and in SLHYPER (4.73; $P = 0.047$). Hazard ratio for overall death was higher in SLHYPO (2.30; $P = 0.009$), in LowT3 (1.63; $P = 0.017$) and in SLHYPER than in EU (3.71; $P = 0.004$). Hazards for SLHYPO, SLHYPER and LowT3 with respect to EU were proportional over the follow-up period.

CONCLUSION: In patients with acute cardiac disease, a mildly altered thyroid status was associated with increased risk of mortality that remains constant during all the follow-up.

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