

Levothyroxine sodium prevents radioiodine-induced death

Treatment with radioiodine appears to be associated with an increased risk of all cause mortality in patients with hyperthyroidism, but treatment with levothyroxine sodium [thyroxine] for radioiodine-induced hypothyroidism ameliorates this risk, report researchers from the UK and Italy.

Their population-based study included a cohort of 2668 patients aged ≥ 40 years with hyperthyroidism who received radioiodine between 1984 and 2002. A total of 1212 patients commenced levothyroxine sodium therapy during the follow-up period.

All-cause mortality was significantly increased in the cohort, compared with expected mortality rates for age-, sex- and year-specific data from England and Wales (relative risk of 1.14; 95% CI 1.04, 1.24); the risks of mortality due to endocrine and metabolic disorders, and circulatory diseases were significantly greater than in the general population. All-cause mortality in patients who did not receive, or prior to receiving, levothyroxine sodium was also significantly increased, compared with matched data; however, during levothyroxine sodium therapy, there was no increased risk of death. The effect of levothyroxine sodium was sustained for > 5 years after initiating therapy.

Franklyn JA, et al. Thyroid function and mortality in patients treated for hyperthyroidism. JAMA: the Journal of the American Medical Association 294: 71-80, 6 Jul 2005 800996592