

Patients with a diagnosis of idiopathic hypogonadotropic hypogonadism were eligible for inclusion. Following discontinuation of treatment, reversal was defined as a normal adult endogenous serum testosterone level of ≥ 270 ng/dl.

Out of 50 men with idiopathic hypogonadotropic hypogonadism, 5 patients met the criteria for reversal of hypogonadism prospectively a mean (\pm SD) of 6 ± 3 weeks after treatment discontinuation, and 10 patients were identified retrospectively. Of the 15 men, 6 had absent puberty and 9 had partial puberty at first presentation. All had abnormal secretion of GnRH-induced luteinizing hormone and had received hormonal treatment to encourage fertility. Mean levels of endogenous testosterone, luteinizing hormone, follicle-stimulating hormone and testicular volume increased in patients who experienced reversal of hypogonadism.

This study reports a reasonably high incidence of sustained reversal. Patients with idiopathic hypogonadotropic hypogonadism should be informed of the possibility of spontaneous reversal of hypogonadism and fertility after discontinuation of reproductive hormonal therapy.

Original article Raivio T *et al.* (2007) Reversal of idiopathic hypogonadotropic hypogonadism. *N Engl J Med* **357**: 863–873

Diabetes increases risk of mortality in patients with acute coronary syndromes

Diabetes mellitus is a well-documented independent risk factor for the development of cardiovascular disease. The influence of diabetes

on the outcomes of patients with acute coronary syndromes (ACS), however, is less clear. Using data pooled from 11 independent Thrombolysis in Myocardial Infarction Study Group trials, Donahoe and colleagues examined the effect of diabetes on mortality following ACS.

This study included 62,036 patients, 46,577 of whom had ST-segment elevation myocardial infarction (STEMI) and 15,459 of whom had non-STEMI. Diabetes mellitus was documented in 17.1% of the study cohort, and was significantly more prevalent among those with non-STEMI ($P < 0.001$).

At 30 days after presentation with STEMI or non-STEMI, mortality was significantly higher in patients with diabetes than in patients without this condition (STEMI 8.5% vs 5.4%; non-STEMI 2.1% vs 1.1%; $P < 0.001$ for both). When the data were adjusted for baseline characteristics, features of ACS presentation and ACS management, presence of diabetes was associated with a relatively higher incidence of death at 30 days in patients presenting with non-STEMI (odds ratio 1.78, 95% CI 1.24–2.56) than in patients presenting with STEMI (odds ratio 1.40, 95% CI 1.24–1.57). Mortality at 1 year after the ACS event was also higher in patients with diabetes than in those without, with diabetes conferring a 1.65-fold greater risk for all-cause mortality at 1 year in patients presenting with non-STEMI, and a 1.22-fold greater risk in patients presenting with STEMI.

Patients with ACS and comorbid diabetes, therefore, represent an extremely high-risk population that requires aggressive management.

Original article Donahoe SM *et al.* (2007) Diabetes and mortality following acute coronary syndromes. *JAMA* **298**: 765–775