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Hysterectomy and risk of cardiovascular disease: a population based cohort study

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Abstract

Aims Hysterectomy for benign indications is one of the commonest surgical procedures in women, but the association between the procedure and cardiovascular disease (CVD) is not fully understood. In this population-based cohort study, we studied the effects of hysterectomy, with or without oophorectomy, on the risk of later life CVD.

Methods and results Using nationwide healthcare registers, we identified all Swedish women having a hysterectomy on benign indications between 1973 and 2003 ($n = 184\,441$), and non-hysterectomized controls ($n = 640\,043$). Main outcome measure was the first hospitalization or death of incident CVD (coronary heart disease, stroke, or heart failure). Occurrence of CVD was determined by individual linkage to the Inpatient Register. In women below age 50 at study entry, hysterectomy was associated with a significantly increased risk of CVD during follow-up [hazard ratio (HR), 1.18, 95% confidence interval (CI), 1.13–1.23; HR, 2.22, 95% CI, 1.01–4.83; and HR, 1.25, 95% CI, 1.06–1.48; in women without oophorectomy, with oophorectomy before or at study entry, respectively, using women without hysterectomy or oophorectomy as reference]. In women aged 50 or above at study entry, there were no significant associations between hysterectomy and incident CVD.

Conclusions Hysterectomy in women aged 50 years or younger substantially increases the risk for CVD later in life and oophorectomy further adds to the risk of both coronary heart disease and stroke.

Key words Cardiovascular disease Coronary Heart Failure Hysterectomy

Oophorectomy Stroke

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