

Study proposal synopsis:

"Transcervical resection of the endometrium as a prevention for endometrial cancer: A population-based nationwide SweGCG study"

Rationale

Transcervical resection of the endometrium (TCRE) and endometrial ablation (EA) are minimal invasive surgical techniques for treatment of heavy menstrual bleeding. The operation techniques were introduced in Sweden in the early 90s and have gained increased usage. Today around 300 of TCREs are performed every year and registered in the Swedish National Quality Register of Gynecological Surgery (QRGS) that started in 1997. Most patients are between 45-50 years of age at operation. The TCRE aims to remove and EA to destroy the entire thickness of the endometrium. The failed cases can either be resected or hysterectomised. The definitive treatment for menstrual bleeding disorders is hysterectomy. It is estimated that around 10-15% of patients undergo a hysterectomy after TCRE or endometrial ablation.

There is so far no published study on the possible preventive effect of TCRE or EA for endometrial carcinoma. Our hypothesis is that TCRE and EA may prevent or reduce the risk of endometrial carcinoma. However, after a subtotal hysterectomy there is some risk for development of EC if endometrial tissue is left in situ.

Objective

Primary outcome;

A: evaluate the rate of endometrial carcinoma in patients with a prior TCRE or EA.

B: evaluate the rate of endometrial carcinoma in patients with a prior subtotal hysterectomy.

Secondary outcome;

if we find women with endometrial carcinoma after TCRE or EA we will assess if there is a difference in frequency of EC between women with a prior TCRE or EA only and those with a prior subtotal hysterectomy.

Study design

Population-based study cohort using the Swedish Quality Registry for Gynecologic Cancer (SQR), and the Swedish National Quality Register of Gynecological Surgery (QRGS)

Date of TCRE or EA and age of the patient will also be assessed.

Operationcodes for TCRE, EA and subtotal hysterectomy and total hysterectomy.

Inclusion criteria

All women diagnosed with endometrial carcinoma included in the SQR between 2010-2016.

All women that have been treated with TCRE or EA for a benign indication in QRGS from 1997-2016.

Exclusion criteria

Women with TCRE or EA and total- or subtotal hysterectomy

Statistical analysis and sample size

Around 8500 patients have been identified in the SQR with endometrial cancer between 2010-2016.

Estimated number of TCRE between 1997-2016= 3100; 150/year between 1997-2007 and 200/year 2008-2016 .

Estimated numbers of EA between 1997-2016= 1300; 50/year 1997-2007 and 100/year 2008-2016.