Endometrial cancer after the Manchester procedure: a nationwide cohort study

Karen Husby¹, Kim Gradel², and Niels Klarskov¹

¹Herlev Hospital

²Odense University Hospital

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Abstract

Objectives To investigate whether the Manchester procedure affects the risk and prognosis of endometrial cancer. **Design** Nationwide historical cohort. **Setting** The nationwide Danish registers including all residents with lifelong follow-up. **Population** All Danish women born 1947–2000, living in Denmark at one point during 1977–2018 undergoing the Manchester procedure (N = 23,935) or anterior colporrhaphy (reference group N = 51,008) during 1977–2018. **Methods** We conducted a nationwide cohort with full follow-up. Chi-Square test for trend to compare the diagnostic stage for the two groups of women. Cox Regression to analyse the risk of endometrial cancer and mortality. The models were adjusted for age, calendar year, income level, and parity. **Main outcome measures** Number of women diagnosed with endometrial cancer, the stage of endometrial cancer at the time of diagnosis and the cancer specific and overall mortality. **Results** During the follow up (median 13 years), 271 (1.13%) women were diagnosed with endometrial cancer after the Manchester procedure and 520 (1.05%) after anterior colporrhaphy. The adjusted hazard ratio (HR) for endometrial cancer was 1.00 (95% confidence interval (CI) 0.86 to 1.16). No difference in stage of cancer was found (p=0.18), nor when stratifying for calendar year. The HR for cancer specific mortality and overall mortality after the Manchester procedure was 0.86 (95% CI 0.65 to 1.15) and 0.93 (95% CI 0.77 to 1.12) respectively. **Conclusions** The Manchester procedure does not affect the risk or prognosis of endometrial cancer. **Keywords** Epidemiology, endometrial cancer, Manchester procedure, uterine prolapse, pelvic organ prolapse, vaginal hysterectomy

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