

Abstracts

Recurrent miscarriage is associated with a family history of ischaemic heart disease: a retrospective cohort study

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Objective: To determine whether women experiencing recurrent miscarriage were more likely to have a family history of cardiovascular disease.

Design: Retrospective cohort study.

Setting: Women having a first birth in Scotland between 1992 and 2006.

Sample: A total of 74 730 first births were linked to the hospital admission and death certification data for the women's parents through the women's birth certificates.

Methods: The incidence of cardiovascular disease in the women's parents was related to the number of miscarriages experienced before their daughter's first births using a Cox proportional hazards modes.

Main outcome measures: Death or hospital admission of the women's parents for ischaemic heart disease (IHD), cerebrovascular disease (CVD) or venous thromboembolism (VTE).

Main results: There was an increased incidence of IHD in the parents of women who experienced two miscarriages before their first birth (hazard ratio 1.25, 95% CI 1.04-1.49) and parents of women who experienced three or more miscarriages before their first birth (hazard ratio 1.56, 95% CI 1.14-2.15). Adjustment for the characteristics of the women at the time of the first birth was without material effect. There was no significant association between miscarriage and family history of CVD or TVE. There was no significant association between the number of therapeutic terminations of pregnancy before the first birth and the incidence of any type of cardiovascular disease in the women's parents.

Conclusions: The parents of women who experience recurrent miscarriage are more likely to experience IHD. Recurrent miscarriage and IHD may have common patho-physiological pathways and genetic predispositions.

Are antibiotic necessary after 48 hours of improvement in infected/septic abortions? A randomized controlled trial followed by a cohort study

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Objective: This study was designed to investigate whether oral antibiotics are necessary, after 48 hours of clinical improvement, in uncomplicated septic abortion.

Study design: In a randomized double-blind clinical trial, 56 women with uncomplicated septic abortion were treated with intravenous antibiotics, followed by uterine evacuation. On hospital discharge (day 1), patients were randomized to receive either oral doxycycline plus metronidazole or placebo, (<37.7°C), reduced vaginal bleeding, and minimal or no pelvic pain.

Results : Cure was observed in all 56 patients. The institutional review board stopped the treatment arm as it was adding risk with no further benefit to the patients. An observational cohort with additional 75 cases was followed up in the no treatment arm and no failure was identified (probability of an adverse event, 0%; 95% confidence interval, 0-0.03).

Conclusion : After 48 hours of clinical improvement, antibiotics may not be necessary.

Prospective evaluation of insulin resistance among endometrial cancer patients

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Objective: Obesity and estrogen are strong risk factors for endometrial cancer (EC). Whereas diabetes

also increases the risk, little is known about related insulin resistance (IR). The purpose of this study was to determine the prevalence of IR in newly diagnosed EC patients.

Study Design: EC patients from a large, metropolitan country were prospectively enrolled from 2005 to 2008. Fasting serum was analyzed for glucose and insulin. IR was defined as a history of diabetes or a quantitative insulin sensitivity check index (QUICKI) ($1/[\log \text{fasting insulin} + \log \text{fasting glucose}]$) value of less than 0.357.

Results : Among 99 patients, diabetes was present in 30, and an abnormal QUICKI was found in 36 additional patients. Increased risk of IR was significantly associated with higher body mass index ($P < .001$), lower socioeconomic status ($P = .007$), and nulliparity ($P = .029$).

Conclusion: IR was highly prevalent in endometrial cancer patients, including nonobese women. Better characterization of metabolic risks in addition to obesity may provide avenues for targeted cancer prevention in the future.

Laparoscopic incidental appendectomy during laparoscopic surgery for ovarian endometrioma

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Objective: This study was designed to investigate the safety and efficacy of laparoscopic incidental appendectomy during laparoscopic surgery for endometrioma.

Study Design: This is a retrospective study of 356 patients undergoing laparoscopic surgery for endometrioma with appendectomy (Appendectomy group, $n = 172$) or not (nonappendectomy group, $n = 184$). Primary outcome measures were operating time, hemoglobin change, hospital stay, return of bowel activity, and any complications. The secondary outcome was appendiceal histopathology.

Results: There were no statistical differences between groups in operating time, postoperative changes in hemoglobin concentration, hospital stay, return of

bowel activity, or complication rate. Of the 172 resected appendices, 52 had histopathologically confirmed abnormal findings including appendiceal endometriosis in 16.

Conclusion: Incidental appendectomy at the time of laparoscopic surgery for endometrioma does not increase operative morbidity, and it has considerable diagnostic and preventive value. However, a large prospective randomized study is needed in the future to confirm this conclusion.

Laparoscopic sacral colpopexy versus total vaginal mesh for vaginal vault prolapse: a randomized trial

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Objective: To compare the laparoscopic sacral colpopexy and total vaginal mesh for vaginal vault prolapse.

Study Design: Women with symptomatic stage ≥ 2 vault prolapse were randomly allocated the laparoscopic sacral colpopexy (53) or total vaginal mesh (55). Primary outcome measures were objective success rates at pelvic organ prolapse quantification sites individually and collectively. Secondary outcome measures included perioperative outcomes, patient satisfaction, quality of life outcomes, complications, and reoperations.

Results : The laparoscopic sacral colpopexy group had a longer operating time, reduced inpatient days, and quicker return to activities of daily living as compared with the total vaginal mesh group. At the 2 year review, the total objective success rate at all vaginal sites was 41 of 53 (77%) for laparoscopic sacral colpopexy as compared with 23 of 55 (43%) in total vaginal mesh ($P < .001$). Reoperation rate was significantly higher after the vaginal mesh surgery 12 of 55 (22%) as compared with laparoscopic sacral colpopexy 3 of 53 (5%) ($P = .006$).

Conclusion: At 2 years, the laparoscopic sacral colpopexy had a higher satisfaction rate and objective success rate than total vaginal mesh with lower perioperative morbidity and reoperation rate.

Trans-obturator tape compared with tension-free vaginal tape in the surgical treatment of stress urinary incontinence: a cost utility analysis

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Objective: To conduct an economic evaluation of the use of trans-obturator tape (TOT) compared with tension-free vaginal tape (TVT) in the surgical treatment of stress urinary incontinence (SUI) in women.

Design: Cost utility analysis from public-payer perspective, conducted alongside a randomised clinical trial (RCT).

Setting: Health services provided in Alberta, Canada.

Population: A total of 194 women who participated in the RCT, followed to 1 year from surgery.

Methods: Data collected on all women in the RCT, over 12 months following surgery. Comparisons undertaken between RCT groups for cost and quality-

adjusted life-years (QALYs). Multiple imputation used for the 10% missing data. Bootstrapping used to account for sampling uncertainty. One-way sensitivity analysis conducted for productivity loss due to time away from work.

Main outcome measures: Utility – 15D questionnaire was used to calculate QALYs. Costs over 12 months – from trial data, health provider and provincial ministry of health.

Results: The TOT group had a non-significant average saving of \$1133 (95% CI-2793; 442), with no difference in average QALYs between groups (95% CI-0.02; 0.01). TOT was cost-saving in over 80% of bootstrapping replications, over a wide range of willingness-to-pay.

Conclusion: The bootstrapping replication results suggest that TOT could be cost-effective compared with TVT in the treatment of SUI. However, these results must be confirmed by longer-term assessment of clinical and economic outcomes, because of concern that surgical tape palpable at 12 months may lead to vaginal erosion and further treatment.