

Abstracts

Peripartum hysterectomy and arterial embolization for major obstetric hemorrhage: a 2-year nationwide cohort study in the Netherlands

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Objective: The purpose of this study was to assess the incidence, case fatality rates, and risk factors of peripartum hysterectomy and arterial embolization for major obstetric hemorrhage.

Study Design: This was a 2-year prospective nationwide population-based cohort study. All pregnant women in the Netherlands during the same period acted as reference cohort (n = 371,021).

Results: We included 205 women; the overall incidence was 5.7 per 10,000 deliveries. Arterial embolization was performed in 114 women (incidence, 3.2 per 10,000; case fatality rate, 2.0%). Peripartum hysterectomy was performed in 108 women (incidence, 3.0 per 10,000; case fatality rate, 1.9%). Seventeen women underwent hysterectomy after failure of embolization. Cesarean delivery (relative risk, 6.6; 95% confidence interval, 5.0–8.7) and multiple pregnancy (relative risk, 6.6; 95% confidence interval, 4.2–10.4) were the most important risk factors in univariable analysis.

Conclusion: The rate of obstetric hemorrhage that necessitates hysterectomy or arterial embolization in the Netherlands is 5.7 per 10,000 deliveries; fertility is preserved in 46% of women by successful arterial embolization.

Comparing uterine fibroids treated by myomectomy through traditional laparotomy and 2 modified approaches: ultraminilaparotomy and laparoscopically assisted ultraminilaparotomy

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Objective: We sought to compare myomectomy performed by laparotomy (LT), and 2 other modified approaches: ultramini laparotomy (UMLT) and laparoscopically assisted UMLT for uterine fibroids with a size <8 cm and the number <5.

Study Design: A cohort study, including 79 (35.3%) women in the LT group, 71 (31.7%) in the UMLT group, and 74 (33.0%) in the laparoscopically assisted UMLT group, was conducted. The outcome was measured by comparing surgical parameters, immediate postoperative recovery, and therapeutic outcomes.

Results: The median follow-up was 52 months with similar recurrence rates in the 3 groups. The modified approaches had advantages not only in the surgical parameters, but also in postoperative recovery, compared to LT (all $P < .05$).

Conclusion: UMLT and laparoscopically assisted UMLT can be used successfully in place of LT in the management of uterine fibroids

Uric acid concentrations are associated with insulin resistance and birth weight in normotensive pregnant women

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Objective: We sought to investigate whether uric acid concentrations are increased in pregnant women with insulin resistance and to correlate both with fetal growth.

Study Design: Uric acid, glucose, and insulin were measured in plasma at 20.4 (± 2.0) weeks' gestation in 263 women. The association between uric acid and insulin resistance, as estimated using the homeostasis model assessment (HOMA), was analyzed and related to birthweights.

Results: In 212 (80.6%) women who remained normotensive throughout pregnancy, HOMA increased 1.23 U per 1-mg/dL increase in uric acid (95% confidence interval, 1.07–1.42; $P = .003$). Infants born to normotensive women in the upper quartile of uric acid and lowest HOMA quartile weighed 435.6 g less than infants of women with highest uric acid and HOMA quartiles ($P < .005$).

Conclusion: Increasing uric acid concentrations were associated with insulin resistance in midpregnancy. Hyperuricemia was associated with lower birthweight in normotensive women, and this effect was attenuated by insulin resistance.

Latency and infectious complications after preterm premature rupture of membranes: impact of body mass index

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Objective: Obesity has been associated with chronic inflammation. We hypothesized that body mass index may be inversely related to latency and directly related to infectious complications after preterm premature rupture of membranes.

Study Design: This secondary analysis of a randomized trial of antibiotics for preterm premature rupture of membranes had information available for 562 subjects. We analyzed the association between body mass index and latency, the occurrence of chorioamnionitis, endometritis, and maternal infectious morbidity after controlling for gestational age at rupture and treatment group. Survival analysis, regression, and test of proportions were used as appropriate.

Results: When evaluated as a categorical or continuous variable, body mass index did not reveal any significant associations. Latency to delivery was affected by gestational age at rupture of membrane and antibiotic therapy but not by body mass index group.

Conclusion: Body mass index was not associated with latency or the occurrence of maternal infectious complications during conservative management of premature rupture of membranes before 32 weeks' gestation.

After-effects reported by women following colposcopy, cervical biopsies and LLETZ: results from the TOMBOLA trial

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Objective: Few studies have investigated physical after-effects of colposcopy. We compared post-colposcopy self-reported pain, bleeding, discharge and

menstrual changes in women who underwent: colposcopic examination only; cervical punch biopsies; and large loop excision of the transformation zone (LLETZ).

Design: Observational study nested within a randomised controlled trial.

Setting: Grampian, Tayside and Nottingham.

Population: Nine hundred-and-twenty-nine women, aged 20–59, with low-grade cytology, who had completed their initial colposcopic management.

Methods: Women completed questionnaires on after-effects at approximately 6-weeks, and on menstruation at 4-months, post-colposcopy.

Main outcome measures: Frequency of pain, bleeding, discharge; changes to first menstrual period post-colposcopy.

Results: Seven hundred-and-fifty-one women (80%) completed the 6-week questionnaire. Of women who had only a colposcopic examination, 14–18% reported pain, bleeding or discharge. Around half of women who had biopsies only and two-thirds treated by LLETZ reported pain or discharge (biopsies: 53% pain, 46% discharge; LLETZ: 67% pain, 63% discharge). The frequency of bleeding was similar in the biopsy (79%) and LLETZ groups (87%). Women treated by LLETZ reported bleeding and discharge of significantly longer duration than other women. The duration of pain was similar across management groups. Forty-three percent of women managed by biopsies and 71% managed by LLETZ reported some change to their first period post-colposcopy, as did 29% who only had a colposcopic examination.

Conclusions Cervical punch biopsies and, especially, LLETZ carry a substantial risk of after-effects. After-effects are also reported by women managed solely by colposcopic examination. Ensuring that women are fully informed about after-effects may help to alleviate anxiety and provide reassurance, thereby minimising the harms of screening.