

Abstracts

Management and outcomes of pregnancies among women with HIV in Oxford, UK, in 2008–2012. A retrospective cohort study.

A retrospective cohort study was undertaken of pregnant women with HIV who delivered at one center in the UK in 2008–2012.

Overall, 61 pregnancies were included; HIV infection was diagnosed during pregnancy for 32%. 71% were diagnosed after the first trimester. At booking, treatment was commenced, either for maternal reasons (CD4 count <350 cells per mm³; 48%) or prevention of mother-to-child-transmission (52%). Viral load was high (>50 copies per mL) at delivery for 13% of women. Delivery was by cesarean for 74%. One neonate was diagnosed with HIV infection. There were 10% preterm births, 15% low birth weight, 18% small-for-gestational-age neonates, and 2% stillbirth.

They concluded that better pregnancy planning, earlier booking and HIV diagnosis, and optimal antiretroviral treatment increase the proportion of women with a low viral load (<50 copies per mL) at delivery, lead to more vaginal deliveries, and further reduce mother-to-child transmission of HIV.

Source: Sarah Montgomery-Taylor, Joris Hemelaar. *Management and outcomes of pregnancies among women with HIV in Oxford, UK, in 2008–2012. International Journal of Gynecology and Obstetrics, Official publication of International Federation of Gynaecology and Obstetrics (FIGO). July 2015 Volume 130, Issue 1, Pages 59–63.*

Fetal and neonatal outcomes after term and preterm delivery following betamethasone administration

A retrospective cohort study was performed of deliveries that occurred at Charité University Hospital Berlin, Germany, between January 1996 and December 2008. The betamethasone group included women with preterm labor and symptomatic contractions, cervical insufficiency, preterm premature rupture of membranes, or vaginal bleeding. Women in the control group were matched for gestational age at time of delivery and had not received betamethasone. Fetal growth changes and neonatal anthropometry were compared.

Among 1799 newborns in the betamethasone group and 42240 in the control group, betamethasone was associated with significantly lower birth weight (154 g lower on average) after adjusting for confounders (e.g. hypertension, smoking, and maternal weight), sex, and gestational age at delivery ($P < 0.05$). The higher the dose, the greater the difference in mean birth weight versus controls in births before 34⁺⁰ weeks (d) 16 mg “444 g; 24 mg “523 g; >24 mg “811 g), without a detectable improvement in neonatal morbidity or mortality. There was a dose-dependent decline in expected fetal weight gain as estimated by serial ultrasonography examinations 6–8 weeks after betamethasone administration ($P < 0.05$).

It was concluded that, Betamethasone exposure reduces fetal weight gain in a dose-dependent manner without improving neonatal morbidity or mortality.

Source: Thorsten B, Deborah M, Sloboda B. T. et al. *Fetal and neonatal outcomes after term and preterm delivery following betamethasone administration. International Journal of Gynecology and Obstetrics. July 2015, Volume 130, Issue 1, Pages 64–69.*

Comparison of TVT and TOT on urethral mobility and surgical outcomes in stress urinary incontinence with hypermobile urethra

The change of urethral mobility after midurethral sling procedures in stress urinary incontinence with hypermobile urethra was compared and the findings with surgical outcomes were assessed.

Of 141 women, 50 (35.5%) women underwent TOT, 91 (64.5%) underwent TVT. In both TOT and TVT groups, postoperative Q tip test values, were statistically reduced when compared with preoperative values. Postoperative Q tip test value in TVT group was significantly smaller than in TOT group. When we compared the Q-tip test value, there were no statistically significant changes between the groups. Postoperative urethral mobility was more frequent in TOT group than in TVT group (40% vs 23.1%, respectively). Postoperative primary and secondary outcomes were similar in both groups.

It was concluded that, although midurethral slings decrease the urethral hypermobility, postoperative mobility status of urethra does not affect surgical

outcomes of midurethral slings in women with preoperative urethral hypermobility.

Source: *Sabri Cavkaytar Mahmut Kuntay Kokanalý et al. Comparison of TVT and TOT on urethral mobility and surgical outcomes in stress urinary incontinence with hypermobile urethra. Woman's Health Education and Research Hospital, Department of Obstetrics and Gynecology, Turkey.*

Can micro RNA profiling in maternal blood identify women at risk for preterm birth?

MicroRNAs (miRNAs), which are highly conserved single-stranded noncoding RNAs that play a crucial role in gene regulation, have now been identified as important players in many diseases states. MRNAs have also been demonstrated to be reliable and useful biomarkers to identify those women who are at risk for specific adverse outcomes. The objective of this study was to determine whether mRNA profiles in maternal blood are different in women who are destined to have a preterm, compared with a term birth.

A nested case-control study was performed with maternal serum that was collected as part of a larger prospective cohort. MRNAs in maternal blood are unlikely to become clinically useful biomarkers for the prediction of preterm birth.

Source: *Michal A. Elovitz, Lauren Anton, Jamie Bastek. Can micro RNA profiling in maternal blood identify women at risk for preterm birth? AJOG June 2015 Volume 212, Issue 6, Pages 782.e1–782.e5.*

International Federation of Gynecology and Obstetrics (FIGO) staging system revised: what should be considered critically for gynecologic cancer?

The revised FIGO staging system for carcinoma of the vulva, cervix, endometrium, and uterine sarcomas was approved by the members of FIGO Executive Board in early September 2008.

For revising the FIGO staging system for carcinoma of the cervix, the 2 major issues, surgical staging and lymph node involvement, have been considered because clinical staging is less accurate than surgical staging, despite significant advances in imaging techniques. The FIGO Committee on Gynecologic Oncology decided that clinical staging should be

continued, while lymph nodal assessment during staging is not necessary because surgical staging cannot be employed worldwide, especially in low-resource countries.

Thus, the above two changes have been approved in the new staging system as follows.

First, the subdivision of the tumor size (with a 4 cm cut-off in maximum diameter) has been applied for previous stage IIA, while the subdivision regarding the tumor size, and uni- or bilateral parametrial invasion has not been considered in previous stages IIB-III B, because of few available data and identity of treatment.

Second, the previous stage 0 has been deleted from the new clinical staging system because it is a pre-invasive lesion. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2757555/> - B4

In the revised FIGO staging system for carcinoma of the endometrium, there are 4 major changes, which are as follows.

- a) The previous stages IA and IB have been combined as stage IA because there was no significant difference in a 5-year survival among previous stage IA G1, IB G1, IA G2 and IB G2. Moreover, stage IB is now equal to or greater than the outer one-half of the myometrium.
- b) Stage II no longer has a subset A and B, and involvement of the endocervical gland of the cervix is now considered stage I.
- c) Pelvic and para aortic lymph node involvement in previous stage IIIC has been separated because many previous studies have suggested that the prognosis may be worse if para-aortic lymph nodes are involved. Thus, the previous stage IIIC is now categorized as IIIC1 (indicating positive pelvic lymph nodes) and IIIC2 (indicating positive para-aortic lymph nodes with or without positive pelvic lymph nodes).
- d) Positive cytology has been excluded as factors for defining the new surgical staging.

Among the revised FIGO staging systems for gynecologic cancers, the greatest change is in the new staging system for carcinoma of the vulva.

Although the previous stage IA remains unchanged because this is the only group of patients with a negligible risk of lymph node metastasis, the previous stages I and II have been combined because many

studies have demonstrated that the size of the lesion with negative lymph nodes is no longer a prognostic factor in previous stages I and II. Moreover, the number and morphology (size and extra capsular spread) of positive lymph nodes have been taken into account because they have been shown to be important prognostic factors, whereas the bilateralism of positive nodes have been discounted due to controversy from previous studies. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2757555/> - B6

Source: *Hee Seung Kim¹ and Yong Sang Song. What should be considered critically for gynecologic cancer? J Gynecol Oncol. 2009 Sep; 20(3): 135–136.*

A follow-up of a randomised study of metformin and insulin in gestational diabetes mellitus: growth and development of the children at the age of 18 months

Follow-up of a randomised controlled trial (RCT) comparing metformin and insulin treatment of GDM was done to compare the growth and development of

children born to mothers with gestational diabetes mellitus (GDM) requiring pharmacological treatment, and randomised to treatment with metformin or insulin.

Data were gathered during routine visits to child welfare clinics at the ages of 6, 12, and 18 months, including weight and height measurements, and assessment of motor, social, and linguistic development.

Children exposed to metformin were significantly heavier at the age of 12 months and taller and heavier at the age of 18 months. The mean ponderal index (PI) did not differ significantly. The motor, social, or linguistic development evaluated at the age of 18 months did not differ between the groups. Over the short term, metformin does not seem to be harmful with regards to early motor, linguistic, or social development.

Source: *H Ijäs¹ M Vääräsmäki¹, T Saarela², R Keravuo³ and T Raudaskoski¹. A follow-up of a randomised study of metformin and insulin in gestational diabetes mellitus: growth and development of the children at the age of 18 months ©2014 Royal College of Obstetricians and Gynaecologists.*