

Abstracts

Posterior axilla sling traction for shoulder dystocia: case review and a new method of shoulder rotation with the sling

Cluver CA, Hofimeyr GJ. Posterior axilla sling traction for shoulder dystocia: case review and a new method of shoulder rotation with the sling. AM J Obstet Gynecol. 2015; 212: 784.

Posterior axilla sling traction (PAST) has been used to deliver cases of intractable shoulder dystocia and to describe a new method of shoulder rotation with the sling. The most commonly used material was suction tubing. Once the posterior shoulder was delivered, the shoulder dystocia was resolved in all cases. Time from insertion to delivery was <3 minutes when recorded. The birth weights of the infants varied from 3200-4800 g. Possible complications are Posterior arm humerus fractures, transient or permanent Erb's palsy. During the review, it was found that, when direct delivery of the posterior shoulder was difficult because of very severe impaction, the sling could be used to rotate the shoulders easily through 180 degrees assisted by counter pressure on the back of the anterior shoulder. This new method was used in 5 cases and may reduce fetal trauma further during difficult shoulder delivery.

This review confirms that PAST can be a lifesaving technique when all another techniques for shoulder dystocia fail. Advantages are that it is easy to use (even by someone who has not seen it used previously), the sling material is readily available, and it is inserted quickly with 2 fingers. This is the first report of its use to rotate the posterior shoulder to the anterior position for delivery.

Does mid trimester cervical length aid in predicting vaginal birth after cesarean?

Emily S. Miller, Allie Sakowicz. Does mid trimester cervical length aid in predicting vaginal birth after cesarean? American Journal of Obstetrics & Gynecology. June 2015, Volume 212, Issue 6, Pages 791.e1–791.e4.

A longer midtrimester cervical length (CL) is associated with an increased chance of cesarean delivery, but CL has not been used to predict the

chance of successful trial of labor after cesarean delivery (TOLAC). A study was done to identify whether midtrimester CL improves the prediction of vaginal birth after cesarean delivery (VBAC) among women undergoing a TOLAC.

Women with 1 prior cesarean and a singleton gestation in the vertex position who had a routine CL assessment between 18 and 24 weeks and chose to undergo a TOLAC were identified. Midtrimester CL and characteristics identifiable in early prenatal care that have been used in a validated predictive model for VBAC (i.e., age, body mass index, race/ethnicity, prior vaginal delivery, prior VBAC, and indication for prior cesarean delivery) were abstracted from the medical record. Multivariable regressions with VBAC as the dependent variable, with and without CL, were created and their predictive capacity compared using receiver-operating characteristic curves and reclassification tables.

It was concluded that, shorter mid trimester CL is associated with a greater chance of vaginal birth after a TOLAC. However, mid trimester CL does not significantly improve the clinical value of a previously developed VBAC prediction model.

Perinatal pharmacokinetics of azithromycin for cesarean prophylaxis

Amelia L. Sutton, Edward P. Acosta Kajal B. Larson. Perinatal pharmacokinetics of azithromycin for cesarean prophylaxis. American Journal of Obstetrics & Gynecology Vol. 212 Iss. 6, June 2015.

Postpartum infections are polymicrobial and typically include *Ureaplasma*, an intracellular microbe that is treated by macrolides such as azithromycin. The aim of the study was to evaluate the perinatal pharmacokinetics of azithromycin after a single preincision dose before cesarean delivery.

Thirty women who underwent scheduled cesarean delivery were assigned randomly to receive 500 mg of intravenous azithromycin that was initiated 15, 30, or 60 minutes before incision and infused over 1 hour. Serial maternal plasma samples were drawn from the end of infusion up to 8 hours after the infusion. Samples of amniotic fluid, umbilical cord blood, placenta,

myometrium, and adipose tissue were collected intraoperatively. Breast milk samples were collected 12-48 hours after the infusion in 8 women who were breastfeeding.

The maximum maternal plasma concentration was reached within 1 hour. The concentrations were sustained with a half-life of 6.7 hours. Azithromycin was detectable in both the umbilical cord plasma and amniotic fluid after the single preoperative dose. Azithromycin concentrations in breast milk were high and were sustained up to 48 hours after the single dose. Simulations demonstrated accumulation in breast milk after multiple doses.

It was concluded that, a single dose of azithromycin achieves effective plasma and tissue concentrations and is transported rapidly across the placenta.

The new LNG-releasing IUS: a new opportunity to reduce the burden of unintended pregnancy

Ignacio C, José-L. The new LNG-releasing IUS: a new opportunity to reduce the burden of unintended pregnancy. *European Journal of Obstetrics and Gynecology and Reproductive Biology*, July 2015. Volume 190, Pages 58–64.

A new levonorgestrel-releasing IUS containing only 13.5 mg of levonorgestrel (IUS12) recently marketed as Jaydess® in Europe, has a smaller size, provides a shorter duration of action, and a lower hormonal content compared to Mirena®, along with a similar efficacy and safety profile, may offer a long-term option that better addresses the needs of nulliparous women. Evidence on the risk of unintended pregnancies in young women – with a special emphasis in Europe, barriers associated with a lower-than-desirable use of LARC methods – especially intrauterine devices (IUD and IUS), and the potential benefits of the new IUS12 including changes in bleeding pattern, safety and user satisfaction – especially with respect to nulliparous

and adolescents – are reviewed here. Evidence supports that IUS12 may offer a LARC option that better addresses the needs of these women.

Menopausal stages and non-alcoholic fatty liver disease in middle-aged women

Seungho R et al. Menopausal stages and non-alcoholic fatty liver disease in middle-aged women. A cross-sectional analysis. *European Journal of Obstetrics and Gynecology and Reproductive Biology*, July 2015 Volume 190, Pages 65–70.

There is no established evidence regarding the influence of the menopausal transition period on non-alcoholic fatty liver disease (NAFLD).

A cross-sectional analysis of 1559 women aged 44–56 years, who underwent a comprehensive health screening examination in the Kangbuk Samsung Hospital, Korea during 2012 and 2013. Information regarding menopause status was collected using a standardized, self-administered questionnaire. The presence of fatty liver was determined using ultrasonography.

Results showed, a higher prevalence of NAFLD was observed across menopausal stages. After adjusting for age, center, BMI, smoking status, alcohol intake, physical activity, educational level, parity and age at menarche, the odds ratios (95% CIs) for NAFLD comparing early transition, late transition, and post-menopause to pre-menopause were 1.07 (0.68–1.67), 1.87 (1.23–2.85), and 1.67 (1.01–2.78), respectively.

This study suggests that there is an increased prevalence of NAFLD in the late menopausal transition as well as post-menopausal stages, independent of a variety of potential confounders. The findings of this study suggest that early intervention strategies implemented before women begin to experience the menopausal transition are needed to reduce the risk of NAFLD.