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New activity in UpToDate

What's new in obstetrics and gynecology

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All topics are updated as new evidence becomes available and our peer review process is complete.
Literature review current through: Jul 2015. | **This topic last updated:** Aug 04, 2015.

The following represent additions to UpToDate from the past six months that were considered by the editors and authors to be of particular interest. The most recent What's New entries are at the top of each subsection.

OBSTETRICS

Use of venlafaxine during early pregnancy and risk of birth defects (June 2015)

Venlafaxine is often used as an alternative to selective serotonin reuptake inhibitors for treating antenatal depression, but the risk of birth defects with venlafaxine is not clear due to inconsistent findings across small observational studies. A study of national registries from multiple countries identified infants who were exposed to venlafaxine during the first trimester (n>2700) and infants who were not exposed (n>2,100,000); the analyses controlled for several potential confounding factors, such as maternal age, smoking, diabetes, and use of other medications (eg, antiepileptics) [1]. The risk of major birth defects was comparable for the two groups, as was the specific risk for cardiac defects. However, this study did not address other perinatal risks, such as preterm birth or hypertension, which have been associated with venlafaxine in other studies. (See "Risks of antidepressants during pregnancy: Drugs other than selective serotonin reuptake inhibitors", section on 'Teratogenicity'.)

Expectant management of mild preeclampsia near term (June 2015)

The optimum time for delivery of women with preeclampsia without features of severe disease and stable maternal and fetal conditions at 34 to 36 weeks of gestation is uncertain. The recent randomized HYPITAT-II trial confirmed findings from observational studies showing that most patients with late-onset mild preeclampsia managed expectantly will reach term without progressing to severe disease or developing an adverse outcome [2]. Newborns benefited from the extra time in utero: the rate of respiratory distress syndrome was 70 percent less with expectant management compared with immediate delivery. Mild preeclampsia with onset at 34 to 36 weeks can be managed expectantly to enable further fetal growth and maturation. Delivery is indicated at 37 weeks. (See "Preeclampsia: Management and prognosis", section on 'Preeclampsia without features of severe disease'.)

Gestational age apps (June 2015)

Electronic techniques, such as apps available for download to smart phones, are generally more accurate for determining gestational age than mechanical wheels. However, a high proportion of gestational age apps are also inaccurate [3]. Clinicians and patients should be aware of this possibility when using a gestational age app, and clinicians should test the accuracy of the app they use. UpToDate provides calculators that determine the estimated date of delivery and current gestational age. (See "Prenatal assessment of gestational age and estimated date of delivery", section on 'Calculator'.)

Skin closure at cesarean delivery (June 2015)

The best method for skin closure at cesarean delivery is controversial. In a recent meta-analysis of staples versus subcuticular sutures for skin closure, stapled closure increased the rate of wound complications (infection and/or separation), while shortening operating time by only a few minutes [4]. Cosmetic appearance, pain perception at discharge, and patient satisfaction were similar for both approaches. Although stapled closure took seven minutes less than sutured closure, the time involved to remove staples also needs to be considered. We suggest reapproximation of the skin with subcuticular sutures rather than staples. (See "Cesarean delivery: Technique", section on 'Skin'.)

Vitamin D supplementation during pregnancy (May 2015)

Several observational studies suggest an association between poor maternal vitamin D status and adverse pregnancy outcomes. A meta-analysis of 13 trials showed that, compared with a control group, vitamin D administration (in varied dosing, types, and schedules) resulted in higher serum 25(OH)D levels at delivery but no difference in the incidence rates of preeclampsia or gestational diabetes [5]. There was also no difference in the incidence rates of small for gestational age, low birth weight, and preterm birth in the neonates. Although routine prenatal vitamin D

supplementation does not appear to prevent low birthweight, preterm birth, or preeclampsia, the earliest interventions in the published trials were made in the late first trimester. Initiation of therapy with vitamin D prior to conception has not been evaluated. (See "Vitamin D and extraskeletal health", section on 'Pregnancy outcomes'.)

Endotracheal suctioning may not benefit nonvigorous neonates with meconium-stained amniotic fluid (May 2015)

Current guidelines recommend intubation and tracheal suctioning (endotracheal suctioning) of residual meconium for nonvigorous (depressed) infants (ie, absent or depressed respirations, decreased muscle tone, or heart rate less than 100 beats/minute) with meconium-stained amniotic fluid (MSAF), although supportive data are limited. In a recent randomized clinical trial of 122 nonvigorous term infants with MSAF in India, there was no additional benefit to endotracheal suctioning compared with no intubation and suctioning [6]. Specifically, there were no differences between the two groups in the incidence of meconium aspiration syndrome (33 versus 31 percent), need for mechanical ventilation (23 versus 25 percent), survival at nine months of age (70 versus 72 percent), and mental and motor developmental status at nine months of age. Although these results suggest that endotracheal suctioning may not be needed in all infants with MSAF regardless of the level of activity, additional confirmatory evidence with larger clinical trials is needed before we recommend a change in practice for nonvigorous infants with MSAF. (See "Prevention and management of meconium aspiration syndrome", section on 'Neonatal care'.)

Effectiveness of pertussis vaccine in infants (May 2015)

Infants younger than 12 months have the highest incidence of pertussis and pertussis-related complications, including death. In a large case-control study, having received ≥1 dose of pertussis vaccine was associated with a 72 percent reduction in the risk of death and a 31 percent reduction in the risk of hospitalization in infants ≥6 weeks of age (the minimum age for the first dose of pertussis vaccine) [7]. However, 64 percent of the deaths occurred in infants younger than six weeks. These findings highlight the importance of timely pertussis immunization for infants, as well as maternal immunization during pregnancy and immunization of the infant's close contacts, as recommended by the Global Pertussis Initiative [8]. (See "Diphtheria, tetanus, and pertussis immunization in infants and children 0 through 6 years of age", section on 'Efficacy and effectiveness' and "Immunizations during pregnancy", section on 'Tetanus, diphtheria, and pertussis vaccination' and "Bordetella pertussis infection in adolescents and adults: Treatment and prevention", section on 'Tdap booster'.)

Nicotine replacement therapy during pregnancy (May 2015)

Cigarette smoking during pregnancy is associated with adverse pregnancy outcomes. Nicotine replacement therapy has had limited use in pregnant women because of concerns regarding potential adverse fetal effects and limited evidence supporting efficacy. In a retrospective study of

nearly 200,000 children born in the United Kingdom, the rates of major congenital anomalies were not statistically different among infants of women using nicotine replacement therapy, women who smoked, and women who did not use either [9]. System-specific analysis reported an increased risk of respiratory anomalies in the nicotine replacement-exposed children, but the absolute risk was 3 per 1000 births, and based on 10 exposed cases out of 157 children with respiratory anomalies. Given the known benefits of smoking cessation during pregnancy, nicotine replacement therapy appears to be a reasonable treatment option for pregnant women who wish to stop smoking. (See "Cigarette smoking and pregnancy", section on 'Nicotine replacement'.)

Induction for imminent macrosomia (April 2015)

Previous studies have reported that induction of labor in pregnancies with suspected macrosomia (estimated fetal weight >4000 grams) has no advantages compared with expectant management. However, induction at a lower weight threshold may be advantageous. In a multicenter randomized trial that evaluated the consequences of induction of pregnancies with imminent macrosomia at 37 to 38 weeks and within three days of randomization, induction reduced the risk of the composite outcome of significant shoulder dystocia and associated morbidity compared with expectant management (2 versus 6 percent) [10]. Imminent macrosomia was defined as estimated fetal weight >3700 grams at 37 weeks or greater than 3900 grams at 38 weeks. We believe these findings are insufficient to recommend induction of labor for imminent macrosomia at 37 and 38 weeks of gestation. For such a strategy to be acceptable, additional large trials would need to confirm a reduction in neonatal morbidity from shoulder dystocia and no increase in neonatal morbidity from iatrogenic prematurity. (See "Shoulder dystocia: Risk factors and planning delivery of at risk pregnancies", section on 'Pregnancies where high birth weight is suspected'.)

Iron supplementation in pregnancy (April 2015)

The total maternal iron requirement associated with pregnancy is about 1000 mg. For this reason, many clinicians prescribe a prenatal vitamin with iron for pregnant women. In a 2015 systematic review for the US Preventive Services Task Force, routine iron supplementation in pregnancy resulted in a 50 to 80 percent reduction in the frequency of iron deficiency anemia at term, but effects on other pregnancy outcomes were inconsistent [11]. We suggest prenatal vitamins with iron for pregnant women for prevention of maternal iron deficiency anemia. (See "Nutrition in pregnancy".)

False positive Down syndrome screening tests (April 2015)

Noninvasive prenatal Down syndrome screening using cell free DNA results in lower false positive and false negative rates than conventional aneuploidy screening tests. In a recent study of Down syndrome screening in an unselected population including almost 16,000 women, the false positive rates of cell free DNA and conventional screening were 0.1 and 5 percent, respectively, and false

negative rates were 0 and 21 percent, respectively [12]. False positive results can be due to factors such as maternal mosaicism, maternal tumors, maternal copy number variants, vanishing twins, confined placental mosaicism, or a failure of the complex bioinformatics necessary to generate a result [13-20]. Despite the low false positive rate with cell free DNA screening, confirmatory diagnostic testing (genetic amniocentesis or chorionic villus sampling) is mandatory after a screen positive result. (See "Noninvasive prenatal testing using cell-free nucleic acids in maternal blood", section on 'Trisomy 21, 18, 13'.)

Statins and pregnancy (April 2015)

The safety of statins in pregnancy is uncertain, but animal studies have raised concerns about fetal harm; human data are mixed. A cohort study of women enrolled in the US Medicaid program found that an association between statins and malformations was no longer present after a propensity analysis that controlled for potential confounders; pre-existing diabetes appeared to be the most important confounder [21]. However, the wide confidence intervals in this study do not exclude a potential increase (or decrease) in risk with statin therapy. We continue to recommend that statins be discontinued prior to conception if possible. (See "Statins: Actions, side effects, and administration", section on 'Risks in pregnancy and breastfeeding'.)

Induction after previous cesarean delivery (March 2015)

The risks and benefits of labor induction in women with a previous cesarean delivery are best understood when compared with the outcome of expectant management in a similar population, rather than a population of women in spontaneous labor. In one such study of over 12,000 women with singleton gestations ≥39 weeks and one low transverse cesarean delivery, women undergoing induction at 39 weeks without an acute obstetric medical indication were more likely to deliver vaginally than those managed expectantly (74 versus 61 percent), but they also experienced a higher rate of uterine rupture (1.4 versus 0.5 percent) [22]. Uterine rupture was defined as a disruption or tear of the uterine muscle and visceral peritoneum or a separation of the uterine muscle with extension to the bladder or broad ligament. These findings affirm previous findings of the high probability of vaginal delivery with induction after a previous cesarean delivery at the cost of an increased risk of uterine rupture. (See "Cervical ripening and induction of labor in women with a prior cesarean delivery", section on 'Likelihood of successful induction'.)

Chronic hypertension may increase risk of congenital anomalies (March 2015)

Children of women with chronic hypertension, either treated or untreated, appear to be at increased risk of congenital malformations, particularly cardiac malformations. In a recent study, the risk of congenital heart disease was increased by 50 percent in offspring of women with untreated hypertension compared with offspring of normotensive controls, which corresponds to 1.4 additional cases of congenital heart disease per 100 pregnancies in women with

hypertension [23]. This suggests that factors associated with hypertension or hypertension itself increases the risk for congenital malformations independent of antihypertensive drug therapy. (See "Management of hypertension in pregnant and postpartum women", section on 'Antihypertensive therapy'.)

Pregnancy outcomes after bariatric surgery (March 2015)

Bariatric surgery prior to pregnancy appears to reduce the risk of certain adverse pregnancy outcomes associated with maternal obesity. In the largest study to date evaluating this issue, women who had bariatric surgery prior to pregnancy were less likely to have gestational diabetes and large-for-gestational-age infants compared with women matched for age and presurgical body mass index (BMI) who had not undergone bariatric surgery [24]. However, they were more likely to have small-for-gestational-age infants. The risks of preterm birth, stillbirth or neonatal death, and congenital malformations were not statistically different between the two groups. (See "Fertility and pregnancy after bariatric surgery", section on 'Pregnancy outcomes'.)

Safety of inhaled long-acting beta agonist/glucocorticoid for asthma during pregnancy (February 2015)

An important clinical question for pregnant women with asthma is whether using a combination long-acting beta-agonist (LABA) plus inhaled glucocorticoid confers an increased risk for adverse fetal outcomes, compared with monotherapy using a higher dose of the inhaled glucocorticoid. In a study of 1302 pregnant women with asthma, the risk for a major congenital malformation was not increased when a LABA plus low dose inhaled glucocorticoid was compared with a medium dose inhaled glucocorticoid, or when a LABA plus medium-dose inhaled glucocorticoid was compared with a high-dose inhaled glucocorticoid [25]. (See "Management of asthma during pregnancy", section on 'Long-acting beta-adrenergic agents'.)

Oral anti-hyperglycemic drugs for treatment of gestational diabetes mellitus (February 2015)

Prevention of macrosomia is a major goal of treatment of gestational diabetes mellitus (GDM), but the best approach is controversial. In a 2015 systematic review and meta-analysis of randomized trials comparing neonatal outcomes in women with GDM treated with glyburide, metformin, or insulin therapy, women assigned to glyburide had a higher rate of macrosomia than those assigned to metformin or insulin therapy [26]. Metformin therapy and insulin therapy resulted in similar rates of macrosomia. We prefer insulin therapy for women with GDM who fail nutritional therapy because it is effective and safe, while there is no information about the long-term effects of transplacental passage of oral anti-hyperglycemic drugs. However, oral anti-hyperglycemic agents are a reasonable alternative for women who refuse to take, or are unable to comply with, insulin therapy. (See "Gestational diabetes mellitus: Glycemic control and maternal prognosis", section on 'Glyburide'.)

Target diastolic blood pressure in pregnancy (February 2015)

In pregnant women with chronic (preexistent) or gestational hypertension, the effect of less-tight versus tight control of hypertension on pregnancy complications is unclear. A randomized trial that assigned pregnant women with gestational or chronic hypertension to diastolic blood pressure treatment targets of 85 or 100 mmHg reported similar maternal, fetal, and neonatal outcomes in both groups [27]. More women in the 100 mmHg target group developed severe hypertension, although this was not associated with an increase in transient ischemic attack or stroke. The trial was not powered to exclude a clinically important increase in fetal growth restriction in the 85 mmHg target group. For these reasons, we continue to suggest a diastolic pressure target of 90 to 100 mmHg for pregnant women with hypertension without end-organ damage. (See "Management of hypertension in pregnant and postpartum women", section on 'Blood pressure goal'.)

Risk of depression among pregnant women with epilepsy (February 2015)

Individuals with epilepsy have an increased prevalence of depression compared with individuals without epilepsy, and this appears to be true during pregnancy and the postpartum period as well. In a population-based study that included 706 pregnancies in women with epilepsy and over 100,000 pregnancies in those without epilepsy, peripartum depression affected 27 percent of women with epilepsy compared with 23 percent of women with other chronic diseases and 19 percent of the entire non-epilepsy population [28]. Risk factors for depression included high seizure frequency, antiepileptic drug use, and prepregnancy depression or anxiety. Detection of depression during pregnancy is important because both pharmacologic and nonpharmacologic treatments are available, and untreated illness may have consequences for both mother and child. (See "Risks associated with epilepsy and pregnancy", section on 'Other risks'.)

Mortality decreasing for extremely preterm infants (January 2015)

Although infants born extremely premature have the highest mortality rate, mortality has decreased with advances in prenatal and neonatal care. This was illustrated in a large prospective study of 22,248 extremely premature infants (defined as gestational age between 22 and 28 6/7 weeks) conducted by the National Institute of Child Health and Human Development Neonatal Research Network that compared mortality across three time periods (2000 to 2003, 2004 to 2007, and 2008 to 2011) [29]. In this analysis, mortality was lowest in the third time period (2008 to 2011) due to decreased rates of deaths related to pulmonary causes (neonatal respiratory distress syndrome and bronchopulmonary dysplasia), immaturity, infection, and central nervous system injury. The study also documented improved prenatal care among mothers of these preterm infants, as the percentage of women who received prenatal care increased throughout the three study periods including higher rates of prenatal glucocorticoid administration. (See "Incidence and mortality of the premature infant", section on 'Extremely preterm infants'.)

Timing of antiretroviral initiation during pregnancy (January 2015)

The risk of HIV transmission from an infected mother to her infant is proportional to the level of maternal viremia at delivery. Among women not already taking an antiretroviral regimen, viral suppression at delivery is more likely when a regimen is initiated earlier during gestation. In a large US cohort of antiretroviral-naïve HIV-infected women who initiated a combination antiretroviral regimen during pregnancy, a detectable viral load at delivery was documented in 13 percent overall, but in 24 percent of those who initiated the regimen during the third trimester [30]. This supports our recommendation to initiate antiretroviral therapy promptly in treatment-naïve pregnant women with advanced HIV disease or CD4 cell count th week of gestation for HIV-infected pregnant women with higher CD4 cell counts. (See "Use of antiretroviral medications in pregnant HIV-infected patients and their infants in resource-rich settings", section on 'When to initiate antiretroviral medications during pregnancy'.)

OFFICE GYNECOLOGY

Improving uptake of long-acting reversible contraceptives (July 2015)

Long-acting reversible contraceptives (LARC), which include implants and intrauterine devices, are the most effective reversible methods to prevent pregnancy. Interventions that increase LARC use lower the rate of unintended pregnancy. In a trial of 1500 women who were randomly assigned to receive either standardized counseling for LARC or routine contraceptive counseling, standardized counseling resulted in increased LARC use and a reduction in unintended pregnancies (8 versus 15 percent) [31]. Introduction of affordable LARC methods in the state of Colorado from 2009 to 2013 was associated with an approximately 40 percent reduction in teen birth and abortion rates compared with previous years [32]. These data add further support to our suggestion to use LARC for women who desire reversible contraception. (See "Overview of contraception", section on 'Effectiveness'.)

Repeat testing for women treated for trichomoniasis (July 2015)

The risk of repeat infection following treatment for a sexually transmitted infection (STI) is high. In the United States, reinfection with *Trichomonas vaginalis* has been reported to occur in up to 17 percent of women following treatment for an initial infection. The 2015 Centers for Disease Control and Prevention (CDC) guidelines on the management of STIs recommend that women treated for confirmed *T. vaginalis* infection undergo repeat testing within three months of treatment, regardless of partner treatment status [33]. Prior guidelines had only listed retesting as a consideration. The preferred diagnostic test for repeat testing is a nucleic acid amplification test (NAAT) on a vaginal swab, which can be performed as soon as two weeks after treatment. Data are insufficient to support retesting men. (See "Trichomoniasis", section on 'Follow-up'.)

Updated CDC guidelines on the management of sexually transmitted infections (June 2015)

The US Centers for Disease Control and Prevention (CDC) updated its guidelines on the management of sexually transmitted infections in June 2015 [34]. Major revisions include a lower threshold for the diagnosis of urethritis based on microscopy of a urethral specimen, a new emphasis on the role of *Mycoplasma genitalium* in persistent urethritis and cervicitis, preference for nucleic acid amplification-based testing for the diagnosis of *Trichomonas vaginali*s, and a recommendation to retest women after treatment for *T. vaginalis* to evaluate for reinfection. New screening recommendations include annual hepatitis C virus (HCV) testing for HIV-infected men who have sex with men and *T. vaginalis* testing for HIV-infected women annually and when pregnant. (See "Urethritis in adult men", section on 'Diagnostic criteria' and "Mycoplasma genitalium infection in men and women", section on 'Nongonococcal urethritis' and "Trichomoniasis", section on 'Follow-up' and "Primary care of the HIV-infected adult", section on 'Sexually transmitted infections'.)

Menopausal hormone therapy and cardiovascular risk: Timing of exposure (June 2015)

Current evidence suggests that the use of menopausal hormone therapy (MHT) in the early menopausal years (<10 years from menopause) may not be associated with excess cardiovascular risk when compared with use in the later menopausal years. This has been referred to as the "timing hypothesis." Additional support for this hypothesis comes from a 2015 meta-analysis of 19 trials of oral (including the Womens Health Initiative), but not transdermal, MHT in over 40,000 postmenopausal women [35]. A subgroup analysis in women who started MHT less than 10 years after menopause showed a lower risk of coronary heart disease (CHD) compared with placebo (RR 0.52; 8 fewer cases of heart disease per 1000 women treated/year) and a lower mortality rate (RR 0.70; 6 fewer deaths per 1000 women treated/year). However, there were important limitations in this analysis; when one methodologically flawed trial was removed, the beneficial effects on CHD and mortality were no longer significant (but no adverse effects were seen). These data provide additional evidence that oral MHT use in younger postmenopausal women is not associated with excess CHD risk. (See "Menopausal hormone therapy: Benefits and risks", section on 'Younger postmenopausal women'.)

Benefit of long-term management on risk for vulvar carcinoma in women with vulvar lichen sclerosus (June 2015)

Vulvar lichen sclerosus is a chronic disease associated with an increased risk for vulvar carcinoma. The findings of a prospective cohort study of 507 women with vulvar lichen sclerosus suggest that topical corticosteroid therapy, used both to achieve disease control and for long-term maintenance treatment, may reduce cancer risk [36]. Women who reported consistent adherence to treatment instructions had a lower incidence of vulvar carcinoma or vulvar intraepithelial neoplasia than women who reported less consistent adherence (0 versus 4.7 percent). In addition, patients who

adhered to treatment had better symptom control and reduced risk for vulvar scarring. These findings suggest that consistent treatment rather than an "as needed" approach to the long-term management of vulvar lichen sclerosus may improve patient outcomes. (See "Vulvar lichen sclerosus", section on 'Topical corticosteroids'.)

Reduced HPV vaccination rate among women who have sex with women (May 2015)

Prior research has suggested that women who have sex with women (WSW) may be less likely to initiate human papillomavirus (HPV) vaccination than their age-matched heterosexual peers. One possible reason for this discrepancy is that both WSW and their healthcare providers may erroneously believe that WSW are not at risk for HPV infection or cervical cancer. In one study of over 12,000 United States women from 2006 to 2010, of women who were aware of the HPV vaccine, only 8 percent of lesbian women had initiated vaccination compared with 28 percent of heterosexual women and 32 percent of bisexual women [37]. This study highlights the need for healthcare providers to discuss HPV vaccination with all patients. The American Academy of Pediatrics and the American College of Obstetricians and Gynecologists recommend vaccination for females and males ages 11 or 12 years of age, up to age 26. (See "Medical care of women who have sex with women", section on 'Prevention of sexually transmitted diseases'.)

Long duration of hot flashes (March 2015)

For many if not most menopausal women, hot flashes last considerably longer than the duration currently recommended for treatment of symptoms (maximum 4 to 5 years to minimize excess breast cancer risk). Among 1449 women with hot flashes followed longitudinally in the Study of Women Across the Nation (SWAN), the median total hot flash duration was 7.4 years, with symptoms persisting for a median of 4.5 years after the final menstrual period (FMP) [38]. Women who were premenopausal or early perimenopausal when they first experienced hot flashes had the longest total duration (>11.8 years, post-FMP median duration 9.4 years). The long duration of hot flashes raises important treatment challenges for many women, particularly those with early onset symptoms. (See "Menopausal hot flashes", section on 'Duration'.)

Menopausal hormone therapy and risk of ovarian cancer (March 2015)

There have been concerns that menopausal hormone therapy (MHT) may be associated with an increase in ovarian cancer risk, but data are conflicting. A meta-analysis of 52 epidemiologic studies including 21,488 postmenopausal women with ovarian cancer now suggests that there is a small excess risk of ovarian cancer with MHT [39]. While the relative risk of ovarian cancer was greater in ever-users than never-users of MHT (RR 1.14), the calculated absolute excess risk associated with MHT was very low: five years of MHT use in women ages 50 to 54 years would result in about one additional ovarian cancer case per 1000 users and one ovarian cancer death per 1700 users. Given these low absolute risks, we do not consider ovarian cancer to be a major consideration when

deciding to take MHT for symptomatic relief. (See "Menopausal hormone therapy: Benefits and risks", section on 'Ovarian cancer'.)

Interim guidelines for cervical cancer screening with primary HPV testing (February 2015)

Interim guidelines from the Society of Gynecologic Oncology and the American Society for Colposcopy and Cervical Pathology are the first US guidelines to suggest primary human papillomavirus (HPV) testing as an option for cervical cancer screening in women starting at age 25 years (table 1) [40]. This option is provided based on a randomized trial comparing primary HPV testing with cytology (Pap test) or co-testing (Pap test and HPV testing) [41]. Among women ≥25 years, primary HPV testing was more sensitive for the detection of cervical intraepithelial neoplasia (CIN) 3 or greater. However, the study is limited by having only three years of follow-up, use of a surrogate outcome (CIN3 rather than cancer), and highly structured follow up protocols that may not be feasible in practice. Given these limitations, we continue to suggest that women age <30 years not be screened for cervical cancer with primary HPV testing. (See "Screening for cervical cancer", section on 'Primary HPV testing'.)

GYNECOLOGIC SURGERY

Safety concerns regarding hysteroscopic sterilization (July 2015)

Safety concerns have been raised about female sterilization via hysteroscopic placement of micro-inserts into the fallopian tubes. A prospective study of this procedure reported that, at five years, up to 38 percent of women reported recurrent menstrual irregularities and up to 5 percent reported recurrent pelvic pain [42]. Between 2002 and 2015, the US Food and Drug Administration (FDA) Manufacturer and User Facility Device Experience (MAUDE) database received 5093 adverse effects reports related to this device, including over 4700 related to menstrual abnormalities or pelvic pain [43]. In September 2015, the FDA will convene a meeting of the Obstetrics and Gynecology Devices Panel to review the safety and effectiveness of hysteroscopic sterilization. (See "Hysteroscopic sterilization", section on 'FDA panel'.)

Efficacy of surgical treatment for ovarian remnant syndrome (February 2015)

Ovarian remnant syndrome is the presence of residual ovarian tissue after oophorectomy, which may cause pelvic pain. Most studies have reported high success rates with surgical treatment. In a retrospective series of women with ovarian remnant syndrome or the related disorder ovarian retention syndrome (when the ovaries are purposefully left intact), rates of success with surgical treatment were lower than described in previous studies [44]. Only 10 of 20 women with ovarian remnant syndrome experienced improvements in pain scores. Endometriosis was a significant risk factor for lack of treatment success. (See "Ovarian remnant syndrome", section on 'Choice of treatment method'.)

GYNECOLOGIC ONCOLOGY

Morcellation associated with worse prognosis in uterine sarcoma (February 2015)

Uterine sarcoma prognosis appears to be worsened if morcellation is used on uterine tissue, typically in cases in which the malignancy was unsuspected at time of surgery. A meta-analysis of observational studies in women with uterine sarcoma found that morcellation (scalpel or power methods) compared with no morcellation was associated with a 3.2-fold higher recurrence rate and 2.4-fold higher mortality rate [45]. This analysis provides the first set of pooled data regarding the adverse impact of uterine morcellation in uterine sarcoma. (See "Differentiating uterine leiomyomas (fibroids) from uterine sarcomas", section on 'Do morcellation, myomectomy, or supracervical hysterectomy worsen prognosis?'.)

REPRODUCTIVE ENDOCRINOLOGY

Empiric progesterone supplementation of no benefit in recurrent pregnancy loss (April 2015)

Recurrent pregnancy loss is an extremely stressful experience for families and clinicians. One proposed mechanism of recurrent pregnancy loss is luteal phase deficiency, or inadequate progesterone production by the corpus luteum. A 2015 Committee Opinion by the American Society of Reproductive Medicine concluded that there is no evidence that empiric treatment of luteal phase deficiency with progesterone supplementation is beneficial to women with recurrent pregnancy loss in natural, unstimulated cycles (ie, no use of fertility therapy) [46]. When abnormal luteal function is the result of an identified medical condition, such as elevated prolactin, the underlying medical problem should be addressed. (See "Management of couples with recurrent pregnancy loss", section on 'Progesterone'.)

Modified IVF to prevent transmission of mitochondrial DNA disorders (February 2015)

Modified in vitro fertilization (IVF) techniques, including donor spindle cell transfer and pronuclear transfer, have been developed to prevent the transmission of inherited mitochondrial DNA (mtDNA) mutations from affected mothers to offspring. These techniques are controversial because the resultant offspring carry DNA from three different individuals- the mother, the father, and the mitochondrial donor, although only 0.05 percent of the individual's total DNA would originate from the mitochondrial donor. In January 2015, the United Kingdom House of Commons approved two techniques, making the UK the first country to offer these therapies [47]. Within the UK, an estimated 150 women a year could benefit from this technology [48]. (See "In vitro fertilization", section on 'Other uses of IVF'.)

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REFERENCES

1. Furu K, Kieler H, Haglund B, et al. Selective serotonin reuptake inhibitors and venlafaxine in early pregnancy and risk of birth defects: population based cohort study and sibling design. BMJ 2015; 350:h1798.
2. Broekhuijsen K, van Baaren GJ, van Pampus MG, et al. Immediate delivery versus expectant monitoring for hypertensive disorders of pregnancy between 34 and 37 weeks of gestation (HYPITAT-II): an open-label, randomised controlled trial. Lancet 2015; 385:2492.
3. Chyjek K, Farag S, Chen KT. Rating Pregnancy Wheel Applications Using the APPLICATIONS Scoring System. Obstet Gynecol 2015; 125:1478.
4. Mackeen AD, Schuster M, Berghella V. Suture versus staples for skin closure after cesarean: a metaanalysis. Am J Obstet Gynecol 2015; 212:621.e1.
5. Pérez-López FR, Pasupuleti V, Mezones-Holguin E, et al. Effect of vitamin D supplementation during pregnancy on maternal and neonatal outcomes: a systematic review and meta-analysis of randomized controlled trials. Fertil Steril 2015; 103:1278.
6. Chettri S, Adhisivam B, Bhat BV. Endotracheal Suction for Nonvigorous Neonates Born through Meconium Stained Amniotic Fluid: A Randomized Controlled Trial. J Pediatr 2015; 166:1208.
7. Tiwari TS, Baughman AL, Clark TA. First pertussis vaccine dose and prevention of infant mortality. Pediatrics 2015; 135:990.
8. Forsyth K, Plotkin S, Tan T, Wirsing von König CH. Strategies to decrease pertussis transmission to infants. Pediatrics 2015; 135:e1475.
9. Dhalwani NN, Szatkowski L, Coleman T, et al. Nicotine replacement therapy in pregnancy and major congenital anomalies in offspring. Pediatrics 2015; 135:859.
10. Boulvain M, Senat MV, Perrotin F, et al. Induction of labour versus expectant management for large-for-date fetuses: a randomised controlled trial. Lancet 2015.
11. Cantor AG, Bougatsos C, Dana T, et al. Routine iron supplementation and screening for iron deficiency anemia in pregnancy: a systematic review for the U.S. Preventive Services Task Force. Ann Intern Med 2015; 162:566.
12. Norton ME, Jacobsson B, Swamy GK, et al. Cell-free DNA analysis for noninvasive examination of trisomy. N Engl J Med 2015; 372:1589.
13. Lau TK, Cheung SW, Lo PS, et al. Non-invasive prenatal testing for fetal chromosomal abnormalities by low-coverage whole-genome sequencing of maternal plasma DNA: review of 1982 consecutive cases in a single center. Ultrasound Obstet Gynecol 2014; 43:254.
14. Lau TK, Jiang FM, Stevenson RJ, et al. Secondary findings from non-invasive prenatal testing for common fetal aneuploidies by whole genome sequencing as a clinical service. Prenat Diagn 2013; 33:602.
15. Wang Y, Chen Y, Tian F, et al. Maternal mosaicism is a significant contributor to discordant sex chromosomal aneuploidies associated with noninvasive prenatal testing. Clin Chem 2014; 60:251.
16. Osborne CM, Hardisty E, Devers P, et al. Discordant noninvasive prenatal testing results in a patient subsequently diagnosed with metastatic disease. Prenat Diagn 2013; 33:609.
17. Grati FR, Malvestiti F, Ferreira JC, et al. Fetoplacental mosaicism: potential implications for false-positive and false-negative noninvasive prenatal screening results. Genet Med 2014; 16:620.
18. Mao J, Wang T, Wang BJ, et al. Confined placental origin of the circulating cell free fetal DNA revealed by a discordant non-invasive prenatal test result in a trisomy 18 pregnancy. Clin Chim Acta 2014; 433:190.
19. Snyder MW, Simmons LE, Kitzman JO, et al. Copy-number variation and false positive prenatal aneuploidy screening results. N Engl J Med 2015; 372:1639.
20. Zhang H, Gao Y, Jiang F, et al. Non-invasive prenatal testing for trisomies 21, 18 and 13: clinical experience from 146,958 pregnancies. Ultrasound Obstet Gynecol 2015; 45:530.
21. Bateman BT, Hernandez-Diaz S, Fischer MA, et al. Statins and congenital malformations: cohort study. BMJ 2015; 350:h1035.

22. Palatnik A, Grobman WA. Induction of labor versus expectant management for women with a prior cesarean delivery. Am J Obstet Gynecol 2015; 212:358.e1.
23. Bateman BT, Huybrechts KF, Fischer MA, et al. Chronic hypertension in pregnancy and the risk of congenital malformations: a cohort study. Am J Obstet Gynecol 2015; 212:337.e1.
24. Johansson K, Cnattingius S, Näslund I, et al. Outcomes of pregnancy after bariatric surgery. N Engl J Med 2015; 372:814.
25. Eltonsy S, Forget A, Beauchesne MF, Blais L. Risk of congenital malformations for asthmatic pregnant women using a long-acting β_2-agonist and inhaled corticosteroid combination versus higher-dose inhaled corticosteroid monotherapy. J Allergy Clin Immunol 2015; 135:123.
26. Balsells M, García-Patterson A, Solà I, et al. Glibenclamide, metformin, and insulin for the treatment of gestational diabetes: a systematic review and meta-analysis. BMJ 2015; 350:h102.
27. Magee LA, von Dadelszen P, Rey E, et al. Less-tight versus tight control of hypertension in pregnancy. N Engl J Med 2015; 372:407.
28. Bjørk MH, Veiby G, Reiter SC, et al. Depression and anxiety in women with epilepsy during pregnancy and after delivery: a prospective population-based cohort study on frequency, risk factors, medication, and prognosis. Epilepsia 2015; 56:28.
29. Patel RM, Kandefer S, Walsh MC, et al. Causes and timing of death in extremely premature infants from 2000 through 2011. N Engl J Med 2015; 372:331.
30. Katz IT, Leister E, Kacanek D, et al. Factors associated with lack of viral suppression at delivery among highly active antiretroviral therapy-naive women with HIV: a cohort study. Ann Intern Med 2015; 162:90.
31. Harper CC, Rocca CH, Thompson KM, et al. Reductions in pregnancy rates in the USA with long-acting reversible contraception: a cluster randomised trial. Lancet 2015.
32. Reducing unintended teen pregnancy in Colorado https://www.colorado.gov/pacific/sites/default/files/HPF_FP_UP-Reducing-Teen-Pregnancy.pdf (Accessed on July 06, 2015).
33. Workowski KA, Bolan GA. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm Rep 2015; 64:1.
34. Workowski KA, Bolan GA. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm Rep 2015; 64:1.
35. Boardman HM, Hartley L, Eisinga A, et al. Hormone therapy for preventing cardiovascular disease in post-menopausal women. Cochrane Database Syst Rev 2015; 3:CD002229.
36. Lee A, Bradford J, Fischer G. Long-term Management of Adult Vulvar Lichen Sclerosus: A Prospective Cohort Study of 507 Women. JAMA Dermatol 2015.
37. Agénor M, Peitzmeier S, Gordon AR, et al. Sexual Orientation Identity Disparities in Awareness and Initiation of the Human Papillomavirus Vaccine Among U.S. Women and Girls: A National Survey. Ann Intern Med 2015; :1.
38. Avis NE, Crawford SL, Greendale G, et al. Duration of menopausal vasomotor symptoms over the menopause transition. JAMA Intern Med 2015; 175:531.
39. Collaborative Group On Epidemiological Studies Of Ovarian Cancer, Beral V, Gaitskell K, et al. Menopausal hormone use and ovarian cancer risk: individual participant meta-analysis of 52 epidemiological studies. Lancet 2015; 385:1835.
40. Huh WK, Ault KA, Chelmow D, et al. Use of primary high-risk human papillomavirus testing for cervical cancer screening: interim clinical guidance. Obstet Gynecol 2015; 125:330.
41. Wright TC, Stoler MH, Behrens CM, et al. Primary cervical cancer screening with human papillomavirus: end of study results from the ATHENA study using HPV as the first-line screening test. Gynecol Oncol 2015; 136:189.
42. Chudnoff SG, Nichols JE Jr, Levie M. Hysteroscopic Essure Inserts for Permanent Contraception: Extended Follow-Up Results of a Phase III Multicenter International Study. J Minim Invasive Gynecol 2015.

43. http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/EssurePermanentBirthControl/ucm452254.htm (Accessed on July 17, 2015).
44. Martinez A, Howard FM. The efficacy of laparoscopic surgical treatment of ovarian remnant and ovarian retention syndromes. J Minim Invasive Gynecol 2015; 22:245.
45. Bogani G, Cliby WA, Aletti GD. Impact of morcellation on survival outcomes of patients with unexpected uterine leiomyosarcoma: a systematic review and meta-analysis. Gynecol Oncol 2015; 137:167.
46. Practice Committee of the American Society for Reproductive Medicine. Current clinical irrelevance of luteal phase deficiency: a committee opinion. Fertil Steril 2015; 103:e27.
47. Dyer C. UK is set to allow mitochondrial donation after MPs vote in favour. BMJ 2015; 350:h657.
48. Gorman GS, Grady JP, Ng Y, et al. Mitochondrial donation--how many women could benefit? N Engl J Med 2015; 372:885.

Literature Search

Search History:
1. EMBASE; ("Intrapartum care" OR pre-eclampsia OR "preterm labour" OR "multiple pregnancy" OR "maternal medicine" OR "fetal abnormal*" OR "fetal growth").ti,ab; 30407 results.
2. EMBASE; 1 [Limit to: English Language and Publication Year Current-2015]; 0 results.
3. EMBASE; 1 [Limit to: English Language and Publication Year 2014-2015]; 3415 results.
4. EMBASE; (manage OR management).ti,ab; 1031320 results.
5. EMBASE; 3 AND 4 [Limit to: English Language and Publication Year 2014-2015]; 426 results.
6. EMBASE; 5 [Limit to: Latest Update and English Language and Publication Year 2014-2015]; 3 results.

Title: Anthropometric characterization of impaired fetal growth risk factors for and prognosis of newborns with stunting orwasting

Citation: JAMA Pediatrics, July 2015, vol./is. 169/7, 2168-6203 (01 Jul 2015)

Author(s): Victora C.G., Villar J., Barros F.C., Ismail L.C., Cameron C., Papageorghiou A.T., Bertino E., Ohuma E.O., Lambert A., Carvalho M., Jaffer Y.A., Altman D.G., Noble J.A., Gravett M.G., Purwar M., Frederick I.O., Pang R., Bhutta Z.A., Kennedy S.H.

Language: English

Abstract: IMPORTANCE Stunting (short length for age) and wasting (low body mass index [BMI] for age) are widely used to assess child nutrition. In contrast, newborns tend to be assessed solely based on their weight. OBJECTIVE To use recent international standards for newborn size by gestational age to assess how stunted and wasted newborns differ in terms of risk factors and prognoses. DESIGN, SETTING, AND PARTICIPANTS A cross-sectional study with follow-up until hospital discharge was conducted at urban sites in Brazil, China, India, Italy, Kenya, Oman, England, and the United States that are participating in the INTERGROWTH-21st Project. The study was conducted from April 27, 2009, to March 2, 2014, and the final dataset for analyses was locked on March 19, 2014. EXPOSURES Sociodemographic and behavioral maternal risk factors, previous pregnancy history, and maternal and fetal conditions during pregnancy were investigated as risk factors for stunting and wasting. Anthropometry at birth was used to predict for neonatal prognosis. MAIN OUTCOMES AND

MEASURES Newborn stunting andwastingwere defined as birth length and BMI for gestational age below the third centiles of the INTERGROWTH-21st standards. Prognosis was assessed through mortality before hospital discharge, admission to neonatal intensive care units, and newborn complications. RESULTS From the 60 206 singleton live births during the study period, we selected all newborns between 33 weeks' and 42 weeks 6 days' gestation at birth (51 200 [85%]) with reliable ultrasound dating. Stunting affected 3.8% and wasting 3.4%of all newborns; both conditions were present in 0.7%of the sample. Of the 26 conditions studied, five were more strongly associated with stunting than with wasting (reported as odds ratios [OR]; 95%CI): short maternal height (6.7; 5.1-9.0), younger maternal age (0.7; 0.5-0.9), smoking (2.8; 2.3-3.3), illicit drug use (2.3; 1.5-3.6), and clinically suspected intrauterine growth restriction (5.2; 4.5-6.0).Wasting was more strongly related than stunting with 4 newborn outcomes (neonatal intensive care stay, 6.7 [5.5-8.1]; respiratory distress syndrome, 4.0 [3.3-4.9]; transient tachypnea, 2.1 [1.5-2.9]; and no oral feeding for >24 hours, 5.0 [3.9-6.5]). Maternal gestational diabetes mellitus was protective against wasting (0.6; 0.5-0.8) but not against stunting (0.9; 0.7-1.1). CONCLUSIONS AND RELEVANCE Although newborn stunting and wasting share some common determinants, they are distinct phenotypes with their own risk factors and neonatal prognoses. To be consistent with the literature on infant and child nutrition, newborns should be classified using the 2 phenotypes of stunting and wasting. The distinction will help to prioritize preventive interventions and focus the management of fetal undernutrition.

Publication Type: Journal: Article

Source: EMBASE

Title: Essential basic and emergency obstetric and newborn care: From education and training to service delivery and quality of care

Citation: International Journal of Gynecology and Obstetrics, June 2015, vol./is. 130/S2(S46-S53), 0020-7292;1879-3479 (01 Jun 2015)

Author(s): Otolorin E., Gomez P., Currie S., Thapa K., Dao B.

Language: English

Abstract: Approximately 15% of expected births worldwide will result in life-threatening complications during pregnancy, delivery, or the postpartum period. Providers skilled in emergency obstetric and newborn care (EmONC) services are essential, particularly in countries with a high burden of maternal and newborn mortality. Jhpiego and its consortia partners have implemented three global programs to build provider capacity to provide comprehensive EmONC services to women and newborns in these resource-poor settings. Providers have been educated to deliver high-impact maternal and newborn health interventions, such as prevention and treatment of postpartum hemorrhage and pre-eclampsia/eclampsia and management of birth asphyxia, within the broader context of quality health services. This article describes Jhpiego's programming efforts within the framework of the basic and expanded signal functions that serve as indicators of high-quality basic and emergency care services. Lessons learned include the importance of health facility strengthening, competency-based provider education, global leadership, and strong government ownership and coordination as essential precursors to scale-up of high impact evidence-based maternal and newborn interventions in low-resource settings.

Publication Type: Journal: Article

Source: EMBASE

Title: Acute coronary syndrome in a postpartum patient with Hellp Syndrome

Citation: European Journal of Cardiovascular Nursing, June 2015, vol./is. 14/(14-15), 1474-5151 (June 2015)

Author(s): Laws E.G., Mariani M., Paradossi U., Marrai R., Casilla G., Angiolini C., Baldassari S., Luciani S., Giannetti J., Baratta S.

Language: English

Abstract: Background: Peripartum cardiomyopathy is a type of dilated cardiomyopathy,which occurs in previously healthy women in the final month of pregnancy and up to 5 months after delivery. The incidence is low(< 0.1%),morbidity and mortality rates high at 5% to 32% . Clinical case: A 32 year old primagravida was referred to our institute 2 hours after ceasarian section for twin delivery with a hypertensive crisis (180/120) and signs of left ventricular overload on her ECG.Echocardiography showed a pericardial effusion with severe mitral insufficiency , hypokinesia of the inferior septum and base wall, elevated troponin levels. Clinical management: Intravenous nitrates were commenced. Due to a low platelet count it was decided to perform a CT coronary angiogram which showed no significant occlusions. Neurological symptoms then began resulting in tonic/clonic convulsions, she was intubated and transferred to the intensive care unit. (neurological investigations were negative) The patient was extubated after 12 hours .Ventricular dysfunction (EF 40%) was treated with intravenous Levosimendan then oral heart failure medication. The ECG and echo gradually improved, discharge EF 55% . A cardiac magnetic resonance suggested a stress associated cardiomyopathy .(?Inverted Takotsubo) Organizational management: This case involved a strong collaboration between 2 hospitals, various departments and professional disciplines. It was decided to transfer the patient post ICU to our pediatric cardiac ward as staff were used to dealing with post partum patients in collaboration with the obstetric nurses, cardiological follow up was by the adult team. Social and Psychological Aspects: The patient was not clinically stable enough to be transferred to the maternity unit. Her babies were brought to her room to enhance bonding and give reassurance. Her partner and own mother were allowed to stay. The twins were bottle and breast fed. She will need counseling explaining the high risk for future pregnancies. Discharge: The patient was discharged on 10th day post partum. At follow ups she and the twins are doing well. Conclusion: The literature shows a correlation between pre-eclampsia and an important increased cardiac risk. A recently published article concludes that early post partum could present a new vulnerable group at increased risk for stress-induced cardiomyopathy (TTS) The cardiac symptoms took attention away from the eclampsia which could have had serious consequences .We need to increase awareness of these problems with our obstetric colleagues in order to improve care and patient education.

Publication Type: Journal: Conference Abstract

Source: EMBASE



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