

Maternity, Obstetrics & Gynaecology Evidence Update March 2023

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NICE

National Institute for
Health and Care Excellence

Most recent guidance published:

No new relevant guidelines

Other Guidance/Reports

[Clinical guidelines for the management of weight during pregnancy: a qualitative evidence synthesis of practice recommendations across NHS Trusts in England](#)
BMC Pregnancy and Childbirth

[FIGO Good Practice Recommendations on the use of progesterone in the management of recurrent first-trimester miscarriage](#)
International Journal of Gynecology & Obstetrics



Cochrane
Library

Systematic Reviews and Research Protocols

[Planned hospital birth compared with planned home birth for pregnant women at low risk of complications](#)

Reviews from other sources

[Association between loop electrosurgical excision procedure and adverse pregnancy outcomes: a meta-analysis](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Clinical practice guidelines for intrapartum cardiotocography interpretation: A systematic review](#)
ANZOG

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[Comparison of clinical safety and efficacy of ultrasound-guided local lauromacrogol injection versus uterine artery embolization in the treatment of caesarean scar pregnancy: a systematic review and meta-analysis](#)

BMC Pregnancy and Childbirth

[Conflicting attitudes between clinicians and women regarding maternal requested caesarean section: a qualitative evidence synthesis](#)

BMC Pregnancy and Childbirth

[Consenting, competence and confidentiality in paediatric adolescent gynaecology](#)

The Obstetrician & Gynaecologist

[Diagnosis or prognosis? An umbrella review of mid-trimester cervical length and spontaneous preterm birth](#)

BJOG

[Effects of timing of umbilical cord clamping for mother and newborn: a narrative review](#)

Archives of Gynecology and Obstetrics

[Efficacy of pharmacological therapies for preventing post-dural puncture headaches in obstetric patients: a Bayesian network meta-analysis of randomized controlled trials](#)

BMC Pregnancy and Childbirth

[Fatherhood and high-risk pregnancy: a scoping review](#)

BMC Pregnancy and Childbirth

[Health-related physical fitness in women with polycystic ovary syndrome versus controls: a systematic review and meta-analysis](#)

Archives of Gynecology and Obstetrics

[Impact of progesterone on the immune system in women: a systematic literature review](#)

Archives of Gynecology and Obstetrics

[Interventions to enhance medication adherence in pregnancy- a systematic review](#)

BMC Pregnancy and Childbirth

[Maternal and newborn plasma oxytocin levels in response to maternal synthetic oxytocin administration during labour, birth and postpartum – a systematic review with implications for the function of the oxytocinergic system](#)

BMC Pregnancy and Childbirth

[Midwives' experiences using personal protective equipment during COVID-19: a scoping review](#)

British Journal of Midwifery

[Prenatal genomic testing for ultrasound detected fetal structural anomalies](#)

The Obstetrician & Gynaecologist

[Reversible cerebral vasoconstriction syndrome in the postpartum period: A case report and review of the literature](#)

International Journal of Gynecology & Obstetrics

[Sacrospinous fixation: Review of relevant anatomy and surgical technique](#)

International Journal of Gynecology & Obstetrics

[Spontaneous skull base cerebrospinal fluid leak during pregnancy: a case report and review of the literature](#)

BMC Pregnancy and Childbirth

[The clinical applications of interventional radiological techniques in obstetrics and gynaecology](#)

The Obstetrician & Gynaecologist

[The effectiveness of continuous positive airway pressure for treating obstructive sleep apnoea in pregnancy: A systematic review](#)
ANZOG

[“Time is on my side”. Disease trajectory of vulvodynia: a systematic review with a narrative synthesis](#)
Archives of Gynecology and Obstetrics

[Use of elexacaftor/tezacaftor/ivacaftor combination in pregnancy](#)
Archives of Gynecology and Obstetrics



This month's clinical questions are...

[How does dexamethasone compare with betamethasone for women and babies at risk of preterm birth?](#)

Primary Research

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Gynaecology

[A comparison of special intrauterine balloons and intrauterine contraceptive devices in the treatment of intrauterine adhesions](#)
Archives of Gynecology and Obstetrics

[A pilot study using unique targeted testing of the urogenital microbiome has potential as a predictive test during IVF for implantation outcome](#)
Archives of Gynecology and Obstetrics

[Altered GABA_A receptor function in women with endometriosis: a possible pain-related mechanism](#)
Acta Obstetrica et Gynecologica Scandinavica

[Clinical evaluation of a new hand-driven hysteroscopic tissue removal device, Resectr™ 5fr, for the resection of endometrial polyps in an office setting](#)
Archives of Gynecology and Obstetrics

[Colporrhaphy using elastic tissue continuous with and obscured behind the fibromuscular layer of the vaginal wall](#)
Journal of Obstetrics and Gynaecology Research

[Comparison of the effectiveness of Dienogest with medroxyprogesterone acetate in the treatment of pelvic pain and recurrence of endometriosis after laparoscopic surgery](#)
Archives of Gynecology and Obstetrics

[Efficacy of minimally invasive pectopexy with concomitant I-stop-mini sling for women with pelvic organ prolapse and overt stress urinary incontinence: A retrospective cohort study](#)
International Journal of Gynecology & Obstetrics

Fluorescence colposcope with TMTP1-PEG4-ICG is comparable to the conventional colposcope in identifying cervical precancerous lesions: A randomized controlled trial
International Journal of Gynecology & Obstetrics

Laparoscopic pectopexy with native tissue repair for pelvic organ prolapse
Archives of Gynecology and Obstetrics

Sonographic features of adenomyosis correlated with clinical symptoms and intraoperative findings: a case-control study
Archives of Gynecology and Obstetrics

The impact of COVID-19 on a specialised menopause clinic: Changes in practice and women's experiences
ANZOG

Maternity/Obstetrics

A new continuous glucose monitor for the diagnosis of gestational diabetes mellitus: a pilot study
BMC Pregnancy and Childbirth

Assessing maternal alcohol consumption in pregnancy: comparison of confidential postnatal maternal interview and measurement of alcohol biomarkers in meconium
Archives of Disease in Childhood

Association between foetal sex and adverse neonatal outcomes in women with gestational diabetes
Archives of Gynecology and Obstetrics

Association between maternal influenza vaccination and neurodevelopmental disorders in childhood: a longitudinal, population-based linked cohort study
Archives of Disease in Childhood

Association between short inter-pregnancy interval and placenta previa and placenta accreta spectrum with respect to maternal age at first cesarean delivery
The Journal of Maternal-Fetal & Neonatal Medicine

Associations between endometriosis and adverse pregnancy and perinatal outcomes: a population-based cohort study
Archives of Gynecology and Obstetrics

Association of increased fetal epicardial fat thickness with maternal pregestational and gestational diabetes
The Journal of Maternal-Fetal & Neonatal Medicine

Association of ultrasound features with outcome and interobserver agreement in women at risk of placenta accreta spectrum
Ultrasound in Obstetrics & Gynecology

D-Transposition of the great arteries with restrictive foramen ovale in the fetus: the dilemma of predicting the need for postnatal urgent balloon atrial septostomy
Archives of Gynecology and Obstetrics

Development of children born to women with twin pregnancies treated with cervical pessary or vaginal progesterone: Follow-up of a randomized controlled trial
Acta Obstetrica et Gynecologica Scandinavica

Diagnostic accuracy of amniotic fluid interleukin-6 for fetal inflammatory response syndrome
Journal of Obstetrics and Gynaecology Research

[Diagnostic factors for recurrent pregnancy loss: an expanded workup](#)
Archives of Gynecology and Obstetrics

[Does benefits-of-breastfeeding language or risks-of-formula-feeding language promote more-positive attitudes toward breastfeeding among midwives and nurses?](#)
BMC Pregnancy and Childbirth

[Does induction of labor at 41 weeks \(early, mid or late\) improve birth outcomes in low-risk pregnancy? A nationwide propensity score-matched study](#)
Acta Obstetrica et Gynecologica Scandinavica

[Does maternal oxygen administration during non-reassuring fetal status affect the umbilical artery gas measures and neonatal outcomes?](#)
Archives of Gynecology and Obstetrics

[Double aortic arch: implications of antenatal diagnosis, differential growth of arches during pregnancy, associated abnormalities and postnatal outcome](#)
Ultrasound in Obstetrics & Gynecology

[Effectiveness and acceptability of home use of misoprostol for medical abortion up to 10 weeks of pregnancy](#)
Acta Obstetrica et Gynecologica Scandinavica

[Effectiveness of ambulatory non-invasive fetal electrocardiography: impact of maternal and fetal characteristics](#)
Acta Obstetrica et Gynecologica Scandinavica

[Effects of 3D-Printed Models and 3D Printed Pictures on Maternal– and Paternal–Fetal Attachment, Anxiety, and Depression](#)
JOGNN

[Effects of epidural analgesia at 1 cm cervical dilatation on labor interventions in full-term primigravida: A retrospective cohort study](#)
Journal of Obstetrics and Gynaecology Research

[Effects of prenatal exercise on gestational weight gain, obstetric and neonatal outcomes: FitMum randomized controlled trial](#)
BMC Pregnancy and Childbirth

[Electronic cigarettes for smoking cessation in pregnancy: a nation–wide mixed methods study](#)
British Journal of Midwifery

[Estimating predictors of severity of group A *Streptococcus* infection in pregnancy](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Evaluation of the fetal myocardial performance index and Epicardial fat thickness in pregnant women with preterm prelabor rupture of membranes](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Fetal and maternal Doppler adaptation to maternal exercise during pregnancy: a randomized controlled trial](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Fetal bladder morphology as a predictor of outcome in fetal lower urinary tract obstruction](#)
Prenatal Diagnosis

[Gestational age-related changes in cervical gland length in normal singleton pregnancies from 17 to 36 weeks of gestation](#)
Journal of Obstetrics and Gynaecology Research

[Grand multiparity, is it a help or a hindrance in a trial of labor after cesarean section \(TOLAC\)?](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Interprofessional team trust in maternity services: a service evaluation](#)
British Journal of Midwifery

[Intravenous iron for treatment of iron deficiency anemia during pregnancy and associated maternal outcomes](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Joint effect of maternal pre-pregnancy body mass index and folic acid supplements on gestational diabetes mellitus risk: a prospective cohort study](#)
BMC Pregnancy and Childbirth

[Longitudinal change in cerebro-placental ratio \(CPR\) between 37 and 40 weeks of pregnancy is associated with non-reassuring fetal status and increased risk of cesarean section](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Mode of delivery and peripartum outcome in women with heart disease according to the ESC guidelines: an Italian multicenter study](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Obesity increases the odds of multiple pregnancies: A nationwide register-based cohort study in Finland](#)
International Journal of Gynecology & Obstetrics

[Oral domperidone versus placebo for enhancing exclusive breastfeeding among post-lower segment cesarean section mothers – a double-blind randomized controlled trial](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Outpatient vs inpatient induction of labor with oral misoprostol: A retrospective study](#)
Acta Obstetrica et Gynecologica Scandinavica

[Patterns of maternal gestational weight gain in association with allergic diseases in offspring: A prospective cohort study](#)
BJOG

[Postpartum women's experiences in a randomized controlled trial of a web-based lifestyle intervention following Gestational Diabetes: a qualitative study](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Prediabetes in pregnancy – follow-up, treatment, and outcomes compared to overt pregestational diabetes](#)
The Journal of Maternal-Fetal & Neonatal Medicine

[Previous pre-eclampsia, gestational diabetes mellitus and the risk of cardiovascular disease: A nested case–control study in Sweden](#)
BJOG

[Providing care to couples experiencing pregnancy loss](#)
British Journal of Midwifery

[Provision of information by midwives for pregnant women in England on guidance on foods/drinks to avoid or limit](#)
BMC Pregnancy and Childbirth

[Risk factors associated with the failure of initial treatment for cesarean scar pregnancy](#)
International Journal of Gynecology & Obstetrics

[Role of depressive symptoms on the development of pelvic girdle pain in pregnancy: A prospective inception cohort study](#)

Acta Obstetrica et Gynecologica Scandinavica

[Same disease - different effect: maternal diabetes impact on birth weight stratified by fetal sex](#)

Archives of Gynecology and Obstetrics

[SARS-CoV-2 placentitis and severe pregnancy outcome after maternal infection: A Danish case series](#)

Acta Obstetrica et Gynecologica Scandinavica

[Second-trimester amniotic fluid proteins changes in subsequent spontaneous preterm birth](#)

Acta Obstetrica et Gynecologica Scandinavica

[Self-management, care needs and clinical management of primiparous mothers during early labour – a qualitative content analysis](#)

BMC Pregnancy and Childbirth

[Socioeconomic and clinical factors associated with excessive gestational weight gain](#)

Archives of Gynecology and Obstetrics

[Sonographic examination at the beginning of the second stage of labor predicts birth outcome in vaginally intended breech deliveries: a blinded prospective study](#)

Archives of Gynecology and Obstetrics

[The acceptability and feasibility of a randomised trial exploring approaches to managing impacted fetal head during emergency caesarean section: a qualitative study](#)

BMC Pregnancy and Childbirth

[The assessment in patients with acute fatty liver of pregnancy \(AFLP\) treated with plasma exchange: a cohort study of 298 patients](#)

BMC Pregnancy and Childbirth

[The indication and treatment outcome predictors of mifepristone treating ectopic pregnancy](#)

Archives of Gynecology and Obstetrics

[The physical-mental health interface in the preconception period: analysis of 131 182 women planning pregnancy in the UK](#)

BJOG

[The pre-pregnancy fasting blood glucose, glycated hemoglobin and lipid profiles as blood biomarkers for gestational diabetes mellitus: evidence from a multigenerational cohort study](#)

The Journal of Maternal-Fetal & Neonatal Medicine

[The risk factors for *Group B Streptococcus* colonization during pregnancy and influences of intrapartum antibiotic prophylaxis on maternal and neonatal outcomes](#)

BMC Pregnancy and Childbirth

[The role of the PLGF in the management of pregnancies complicated with fetal microsomia](#)

Archives of Gynecology and Obstetrics

[The utility of complete blood parameter indices to predict stillbirths](#)

The Journal of Maternal-Fetal & Neonatal Medicine

[Vacuum-assisted delivery outcomes: is advanced maternal age a factor?](#)

Archives of Gynecology and Obstetrics

[Women's experiences of trauma, the psychosocial impact and health service needs during the perinatal period](#)

BMC Pregnancy and Childbirth

BMJ Best Practice

- **30 Mar 2023**Topic: [Assessment of abdominal pain in pregnancy](#)
 - **28 Mar 2023**Topic: [Assessment of recurrent miscarriage](#)
 - **24 Mar 2023**Topic: [Mastitis and breast abscess](#)
 - **22 Mar 2023**Topic: [Gestational hypertension](#)
 - **17 Mar 2023**Topic: [Antiphospholipid syndrome](#)
 - **15 Mar 2023**Topic: [Cervicitis](#)
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UptoDate

What's new in obstetrics and gynecology

Intrauterine transfusion for alpha thalassemia major (March 2023)

Alpha thalassemia major (ATM; loss of all four alpha globin genes) is usually incompatible with live birth unless intrauterine transfusions (IUT) are performed. In a series of 19 pregnancies with prenatally diagnosed ATM, all 14 fetuses treated with >2 IUT survived to delivery, while the 5 fetuses who did not receive IUT died in utero or shortly after birth [2]. Earlier initiation of IUT correlated with higher neurodevelopmental scores. For patients electing to proceed with fetal therapy, IUT should be initiated as soon as technically possible (18 weeks at most fetal treatment centers). (See "[Alpha thalassemia major: Prenatal and postnatal management](#)", section on '[Intrauterine transfusions](#)'.)

Timing of aspirin discontinuation in preeclampsia prophylaxis (March 2023)

The optimal time to discontinue [aspirin](#) use for preventing preeclampsia is unclear, and practice varies. In a randomized trial in Spain, patients at high risk of preterm preeclampsia based on a first-trimester screening algorithm began aspirin 150 mg daily before 14 weeks of gestation [3]. Blood angiogenic factors were measured at 24 to 28 weeks, and those at low preeclampsia risk based on these results discontinued aspirin prophylaxis. The rates of preterm and term preeclampsia and most adverse outcomes were not significantly different for the two groups, but the early discontinuation group had less minor antepartum bleeding (7.6 versus 12.3 percent). These findings warrant further study. They are not generalizable to populations such as the United States, where angiogenic factor testing is unavailable, a lower dose of aspirin (81 mg) is commonly used, and the population is more diverse. (See "[Preeclampsia: Prevention](#)", section on '[Dose](#)'.)

Extending low molecular weight heparin until closer to delivery (March 2023)

Some obstetricians replace low molecular weight (LMW) heparin with [unfractionated heparin](#) at 36 to 37 weeks of gestation to improve the patient's chances of receiving neuraxial anesthesia for labor and delivery, if desired. However, an analysis of data from the Highlow trial of LMW heparin prophylaxis in pregnancy found that most patients were eligible for neuraxial anesthesia at the unplanned onset of labor, including 82 percent of patients on low-dose and 61 percent of patients on intermediate-dose LMW heparin [12]. Numbers of eligible patients were higher for planned labor (93 and 81 percent). These results support extended use of LMW heparin prophylaxis to 38 to 39 weeks or even until onset of labor in many individuals. (See "[Use of anticoagulants during pregnancy and postpartum](#)", section on '[Switch to unfractionated heparin](#)'.)

Combination medical therapy not superior to methotrexate alone for treating ectopic pregnancy (March 2023)

Ectopic pregnancy is usually treated with surgery or [methotrexate](#) (MTX) alone, but use of MTX with another medication (eg, [gefitinib](#), [mifepristone](#)) has been described. In a randomized trial comparing a single dose of MTX plus seven days of either gefitinib or placebo in over 300 patients with tubal ectopic pregnancy, both groups had similar rates of surgical intervention, time to pregnancy resolution, subsequent doses of MTX, and serious complications [20]. However, more patients in the gefitinib group experienced diarrhea and rash. In our practice, we do not use

combination medical therapy because MTX alone is effective, and combination therapy increases side effects and cost. (See "[Ectopic pregnancy: Methotrexate therapy](#)", section on 'Role of combined drug therapy'.)

Assisted reproductive technology outcomes in euthyroid women with thyroid peroxidase (TPO) antibodies (March 2023)

A 2022 meta-analysis of observational studies showed higher rates of adverse assisted reproductive technology (ART) outcomes in euthyroid women with, compared to without, thyroid peroxidase (TPO) antibodies, although the findings were limited by the low quality of the evidence [28]. In a subsequent retrospective study of 449 TPO antibody-positive and 2945 antibody-negative Chinese women undergoing in vitro fertilization or intracytoplasmic sperm injection, there was no difference in oocyte retrieval, fertilization, embryo utilization, blastocyst formation, pregnancy rate, or live birth rate between the two groups [29]. Although the new study was larger than most previous studies and attempted to control for numerous potential confounding factors, it was retrospective in design and has similar limitations as previous observational studies. The association between thyroid autoimmunity and adverse ART outcomes remains uncertain. (See "[Overview of thyroid disease and pregnancy](#)", section on 'Pregnancy outcomes'.)

Online Resources

[BestBETs](#) - BETs bring the evidence one step closer to the bedside, by providing answers to very specific clinical problems, using the best available evidence.

[BNF](#) – British National Formulary

[Royal College of Midwives](#) – clinical practice and guidelines (members only access)

[The Royal Marsden Manual of Clinical Procedures](#) – available via your Athens login

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Midwifery	MIDRS
