# National Institute for Health and Care Excellence

Draft for consultation

## Twin and triplet pregnancy

Glossary and abbreviations

NICE guideline tbc
Supplementary material B
March 2019

**Draft for Consultation** 

Supplementary material was developed by the National Guideline Alliance, hosted by the Royal College of Obstetricians and Gynaecologists



#### Disclaimer

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or service users. The recommendations in this guideline are not mandatory and the guideline does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the <u>Welsh Government</u>, <u>Scottish Government</u>, and <u>Northern Ireland Executive</u>. All NICE guidance is subject to regular review and may be updated or withdrawn.

#### Copyright

© NICE, 2019. All rights reserved. Subject to Notice of Rights.

ISBN:

## DRAFT FOR CONSULTATION Contents

#### **Contents**

Glossary	5
Abbreviations	11

## **Glossary**

Definitions for many of the terms used in NICE guidelines are available at <a href="https://www.nice.org.uk/process/pmg20/chapter/glossary">https://www.nice.org.uk/process/pmg20/chapter/glossary</a>. This glossary defines the terms that are specific to this guideline.

See also the glossary for the 2011 guideline CG129 <u>Multiple pregnancy: antenatal care for twin and triplet pregnancies</u>.

Term	Definition
Active management of third stage	A package of care comprising the following components:  • routine use of drugs to cause contraction of the uterus  • clamping and cutting of the cord  • controlled cord traction after signs of separation of the placenta
Ambulatory uterine activity monitoring	Provides objective data about uterine contractions to facilitate the early diagnosis of labour
Area under the curve	A summary measure of the accuracy of a diagnostic test
Asymptomatic	Causes no symptoms
Attrition bias	Systematic differences between comparison groups in withdrawals or exclusion of participants from a study
Breech (presentation)	A baby which is so positioned in the womb that the buttocks or feet are delivered first
Bronchopulmonary dysplasia	A chronic (long-term) lung condition in prematurely born babies who received mechanical ventilation and/or supplemental oxygen
Caesarean section	A surgical operation for delivering a baby by cutting through the wall of the mother's abdomen. This may be an elective (planned) or emergency procedure
Cardiotocography	Electronic recording of the fetal heart rate using either a Doppler ultrasound transducer strapped to the woman's abdomen, or an electrode attached to the fetal scalp, plus a second toco transducer strapped to the woman's abdomen to record uterine contractions
Case-control study	A study to find out the cause(s) of a disease or condition. This is done by comparing a group of patients who have the disease or condition (cases) with a group of people who do not have it (controls) but who are otherwise as similar as possible (in characteristics thought to be unrelated to the causes of the disease or condition). This means the researcher can look for aspects of their lives that differ to see if they may cause the condition. For example, a group of people with lung cancer might be compared with a group of people the same age that do not have lung cancer. The researcher could compare how long both groups had been exposed to tobacco smoke. Such studies are retrospective because they look back in time from the outcome to the possible causes of a disease or condition
Cephalic (presentation)	A baby so positioned in the womb that the head is delivered first
Cerebral palsy	The general term for a number of neurological conditions that affect movement and co-ordination
Cervical cerclage	A surgical treatment for cervical incompetence or insufficiency
Cervical pessary	A medical device used to treat cervical incompetence or insufficiency

Term	Definition
Cervical shortening	A condition in pregnant women where the cervix becomes softer and weaker than normal
Cochrane Review	The Cochrane Library consists of a regularly updated collection of evidence based medicine databases including the Cochrane Database of Systematic Reviews (reviews of randomised controlled trials prepared by the Cochrane Collaboration)
Cohort study	A study with 2 or more groups of people – cohorts – with similar characteristics. One group receives a treatment, is exposed to a risk factor or has a particular symptom and the other group does not. The study follows their progress over time and records what happens
Confounder and confounding factor	Something that influences a study and can result in misleading findings if it is not understood or appropriately dealt with. For example, a study of heart disease may look at a group of people who exercise regularly and a group who do not exercise. If the ages of the people in the 2 groups are different, then any difference in heart disease rates between the 2 groups could be because of age rather than exercise. Therefore age is a confounding factor
Continuous outcome	Data with a potentially infinite number of possible values within a given range. Height, weight and blood pressure are examples of continuous variables
Control group	A group of people in a study who do not receive the treatment or test being studied. Instead, they may receive the standard treatment (sometimes called 'usual care') or a dummy treatment (placebo). The results for the control group are compared with those for a group receiving the treatment being tested. The aim is to check for any differences. Ideally, the people in the control group should be as similar as possible to those in the treatment group, to make it as easy as possible to detect any effects due to the treatment
Dichorionic twin pregnancy	Each baby has a separate placenta
Dichorionic diamniotic triplet pregnancy	One baby has a separate placenta and amniotic sac and 2 of the babies share a placenta and amniotic sac
Dichorionic triamniotic triplet pregnancy	One baby has a separate placenta and 2 of the babies share a placenta; all 3 babies have separate amniotic sacs
Dichotomous outcomes	Outcome that can take 1 of 2 possible values, such as dead/alive, smoker/non-smoker, present/not present (also called binary data)
Effect (as in effect measure, treatment effect, estimate of effect, effect size)	A measure that shows the magnitude of the outcome in 1 group compared with that in a control group. For example, if the absolute risk reduction is shown to be 5% and it is the outcome of interest, the effect size is 5%. The effect size is usually tested, using statistics, to find out how likely it is that the effect is a result of the treatment and has not just happened incidentally
Evidence	Information on which a decision or guidance is based. Evidence is obtained from a range of sources including randomised controlled trials, observational studies, expert opinion (of clinical professionals or patients)
Exclusion criteria (literature review)	Explicit standards used to decide which studies should be excluded from consideration as potential sources of evidence
Exclusion criteria (clinical	Criteria that define who is not eligible to participate in a clinical study

Term	Definition
study)	
Fetal blood sampling	A technique to measure the level of acid–base status of the baby's blood. A sample of blood is taken from the baby's scalp and either the pH or lactate value is measured. It is used as an adjunct to cardiotocography to help to clarify whether the baby is developing an acidosis when may cause additional interventions to be required
Fetal monitoring	Method used to monitor the fetal heartbeat during labour
Fixed-effect model	In meta-analysis, a model that calculates a pooled effect estimate using the assumption that all observed variation between studies is caused by the play of chance. Studies are assumed to be measuring the same overall effect
Gestational age	A term used during pregnancy to describe how far along the pregnancy is; measured in weeks
Hazard ratio	A hazard is the rate at which events happen, so that the probability of an event happening in a short time interval is the length of time multiplied by the hazard. Although the hazard may vary with time, the assumption in proportional hazard models for survival analysis is that the hazard in 1 group is a constant proportion of the hazard in the other group. This proportion is the hazard ratio
Heterogeneity	The term is used in meta-analyses and systematic reviews to describe when the results of a test or treatment (or estimates of its effect) differ
Hysterectomy	Surgical removal of the uterus. This does not necessarily involve removal of the ovaries
Imprecision	Results are imprecise when studies include relatively few patients and few events and thus have wide confidence intervals around the estimate of effect
Inclusion criteria (literature review)	Explicit criteria used to decide which studies should be considered as potential sources of evidence
Incremental net benefit (INB)	The value (usually in monetary terms) of an intervention net of its cost compared with a comparator intervention. The INB can be calculated for a given cost-effectiveness (willingness to pay) threshold. If the threshold is £20,000 per QALY gained then the INB is calculated as: (£20,000×QALYs gained) minus incremental cost
Indirectness	The available evidence is different to the review question being addressed, in terms of the population, the intervention, the comparison and the outcomes (PICO) or in terms of the population, the index test, the reference standard and the outcomes (PIRO)
Induction of labour	A procedure where the midwife or doctor starts labour artificially by using a membrane sweep, pessary or hormone drip
Intervention	In medical terms this could be a drug treatment, surgical procedure, diagnostic or psychological therapy. Examples of public health interventions could include action to help someone to be physically active or to eat a more healthy diet
Intermittent auscultation	Intermittent measurement of the fetal heart rate using a Doppler ultrasound or a Pinard stethoscope
Intraventricular haemorrhage	Bleeding into the brain's ventricular system, where the cerebrospinal fluid is produced and circulates
Hypoxic ischaemic encephalopathy	A lack of oxygen and/or blood flow getting to a baby during birth
Mean	An average value, calculated by adding all the observations and

Term	Definition
	dividing by the number of observations
Meconium aspiration syndrome	It occurs when a baby breathes in amniotic fluid containing meconium
Median	The value of the observation that comes half-way when the observations are ranked in order
Midtrimester loss	The death of a fetus in the second trimester
Minimal important difference (MID)	Thresholds for clinical importance, which represent minimal important differences for benefit or for harm; for example the threshold at which drug A is less effective than drug B by an amount that is clinically important to patients
Monochorionic diamniotic twin pregnancy	Both babies share a placenta but have separate amniotic sacs
Monochorionic diamniotic triplet pregnancy	All 3 babies share 1 placenta; 1 baby has a separate amniotic sac and 2 babies share 1 sac
Monochorionic monoamniotic twin pregnancy	Both babies share a placenta and amniotic sac
Monochorionic monoamniotic triplet pregnancy	All 3 babies share a placenta and amniotic sac
Monochorionic triamniotic triplet pregnancy	All 3 babies share 1 placenta but each has its own amniotic sac
Morbidly adherent placenta	It occurs when the placenta grows to deeply into the uterine wall and fails to detach from it at birth
Multivariate analysis/model	A statistical model for analysis of the relationship between 2 or more predictor (independent) variables and the outcome (dependent) variable
Neonatal encephalopathy	A broad term for neurological dysfunction in an infant
Necrotising enterocolitis	A medical condition primarily seen in preterm infants, where portions of the bowel undergo necrosis
Neonatal death/mortality	The death of a baby within the first 28 days of life
Neonatal morbidity	Health disorders in neonates occurring the first 4 weeks of life
Neurodevelopmental delay	Disabilities in the functioning of the brain that affect a child's behaviour, memory or ability to learn
Outcome	The impact that a test, treatment, policy, programme or other intervention has on a person, group or population. Outcomes from interventions to improve the public's health could include changes in knowledge and behaviour related to health, societal changes (for example a reduction in crime rates) and a change in people's health and wellbeing or health status. In clinical terms, outcomes could include the number of patients who fully recover from an illness or the number of hospital admissions, and an improvement or deterioration in someone's health, functional ability, symptoms or situation.  Researchers should decide what outcomes to measure before a study begins
Opportunity cost	The loss of other healthcare programmes displaced by investment in or introduction of another intervention. This may be best measured by the health benefits that could have been achieved had the money been spent on the next best alternative healthcare intervention

Term	Definition
Pairwise analysis	A process of comparing entities in pairs to judge which of each entity is
•	preferred, or has a greater amount of some quantitative property
Perinatal death/mortality	Death occurring after 24 completed weeks of pregnancy and within 7 days after birth
Periventricular leucomalacia	A form of white-matter brain injury, characterised by the necrosis of white matter near the lateral ventricles
Physiological management of the third	A package of care comprising the following components:
stage	no routine use of uterotonic drugs
	no clamping of the cord until pulsation has stopped
<b>D</b>	delivery of the placenta by maternal effort
Placenta praevia	A condition where the placenta lies low in uterus and partially or wholly blocks the neck of the uterus
Postpartum haemorrhage	Blood loss over 1000ml from the vagina following labour
Prognostic factor	Patient or disease characteristics, for example age or co-morbidity, that influence the course of the disease under study. In a randomised trial to compare 2 treatments, chance imbalances in variables (prognostic factors) that influence patient outcome are possible, especially if the size of the study is fairly small. In terms of analysis these prognostic factors become confounding factors. See also prognostic marker
Prospective study	A research study in which the health or other characteristic of participants is monitored (or 'followed up') for a period of time, with events recorded as they happen. This contrasts with retrospective studies
Protocol (review)	A document written prior to commencing a review that details exactly how evidence to answer a review question will be obtained and synthesised. It defines in detail the population of interest, the interventions, the comparators/controls and the outcomes of interest (PICO) or the population of interest, the index test, the reference standard and the outcomes (PIRO)
Publication bias	Publication bias occurs when researchers publish the results of studies showing that a treatment works well and don't publish those showing it did not have any effect. If this happens, analysis of the published results will not give an accurate idea of how well the treatment works. This type of bias can be assessed by a funnel plot
Reference standard	The test that is considered to be the best available method to establish the presence or absence of the outcome – this may not be the one that is routinely used in practice
Retrospective study	A research study that focuses on the past and present. The study examines past exposure to suspected risk factors for the disease or condition. Unlike prospective studies, it does not cover events that occur after the study group is selected
Risk ratio	The ratio of the risk of disease or death among those exposed to certain conditions compared with the risk for those who are not exposed to the same conditions (for example the risk of people who smoke getting lung cancer compared with the risk for people who do not smoke). If both groups face the same level of risk, the relative risk is 1. If the first group had a relative risk of 2, subjects in that group would be twice as likely to have the event happen. A relative risk of less than 1 means the outcome is less likely in the first group. Relative risk is sometimes referred to as risk ratio
Sepsis	A whole-body inflammation caused by an infection
Standard deviation (SD)	A measure of the spread or dispersion of a set of observations, calculated as the average difference from the mean value in the

Term	Definition
	sample
Subgroup analysis	An analysis in which the intervention effect is evaluated in a defined subset of the participants in a trial, or in complementary subsets
Third stage of labour	The interval from the birth of the baby to the expulsion of the placenta and membranes
Trichorionic triplet pregnancy	Each baby has a separate placenta and amniotic sac
Twin anaemia polycythaemia sequences (TAPS)	A form of twin-to-twin transfusion syndrome that complicates some of monochorionic twin pregnancies. It occurs when there are unequal blood counts between the fetuses in the womb
Utility	In health economics, a 'utility' is the measure of the preference or value that an individual or society places upon a particular health state. It is generally a number between 0 (representing death) and 1 (perfect health). The most widely used measure of benefit in cost—utility analysis is the quality adjusted life year (QALY), but other measures include disability adjusted life years (DALYs) and healthy year equivalents (HYEs)

### **Abbreviations**

Abbreviation	Definition
AC	abdominal circumference
AGA	appropriate-for-gestational age
AEDV	absent end diastolic velocity in the umbilical artery
AFD	amniotic fluid discordance
AMSTAR	Assessing the Methodological Quality of Systematic Reviews
AUC	area under the curve
BMI	body mass index
BP	blood pressure
BPD	biparietal diameter
BPD	bronchopulmonary dysplasia
BW	birth weight
BWD	birth weight discordance
CCTR	Cochrane Controlled Trials Register
CDSR	Cochrane Database of Systematic Reviews
CI	confidence interval
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CL	cervical length
CRL	crown-rump length
CS	caesarean section
CT	computed tomography
CTG	cardiotocography
DARE	Database of Abstracts of Reviews of Effects
DCDA	dichorionic diamniotic
DCTA	dichorionic triamniotic
DV	ductus venosus
DV-RAV	ductus venosus absent/reversed A-wave
DVP	deepest vertical pocket
ECV	external cephalic version
EFM	electronic fetal monitoring
EFW	estimated fetal weight
EFWD	estimated fetal weight discordance
FASP	Fetal Anomaly Screening Programme
f-beta-hCG	free beta human chorionic gonadotrophin
FBS	fetal blood sampling
fFN	fetal fibronectin
FFTS	feto-fetal transfusion syndrome
FGR	fetal growth restriction
FL	femoral length
FMF	Fetal Medicine Foundation
FSE	
	fetal scalp electrode
GA	gestational age
GDG	guideline development group
GP CRADE	general practitioner
GRADE	Grading of Recommendations Assessment, Development and Evaluation head circumference
HC	
hCG	human chorionic gonadotropin
HDU	high dependency unit

Abbreviation	Definition
Hgb or Hb	haemoglobin
HIV	human immunodeficiency virus
HTA	Health Technology Assessment
ICER	incremental cost effectiveness ratio
IPD	individual patient data
IQR	interquartile range
IU	international unit
IUGR	intrauterine growth restriction
IUFD	intrauterine fetal death
ITU	intensive care unit
IV	intravenous
IVF	in vitro fertilisation
IVH	intraventricular haemorrhage
LR+	positive likelihood ratio
LR-	negative likelihood ratio
MA	meta-analysis
Max	maximum
MCDA	monochorionic diamniotic
MCA-PSV	
MCMA	middle cerebral artery peak systolic velocity monochorionic monoamniotic
MCTA	monochorionic triamniotic
mg	milligrams
MD	mean difference
MID	minimally important difference
min	minute
ml PD-00	millilitres
mPROG	intramuscular progesterone
MVP	maximum vertical pocket
NC	not calculable
NCC-WCH	National Collaborating Centre for Women's and Children's Health
NEC	necrotising enterocolitis
NGA	National Guideline Alliance
NHS	National Health Service
NHS EED	NHS Economic Evaluation Database
NHS FASP	NHS Fetal Anomaly Screening Programme
NICE	National Institute for Health and Care Excellence
NICU	neonatal intensive care unit
NPV	negative predictive value
NT	nuchal translucency
OR	odds ratio
PAPP-A	pregnancy-associated plasma protein A
PCT	primary care trust
PPH	postpartum haemorrhage
PPV	positive predictive value
PTB	preterm birth
PTP+	post-test probability (of a positive test)
PTP-	post-test probability (of a positive test)  post-test probability (of a negative test)
PUVF	pulsatile umbilical venous flow
QADAS	·
MUNO	Quality Assessment of Studies of Diagnostic Accuracy

Abbreviation	Definition
QALY	quality adjusted life years
RCOG	Royal College of Obstetricians and Gynaecologists
RCT	randomised controlled trial
RDS	respiratory distress syndrome
REDV	reverse end diastolic velocity in the umbilical artery
RFDV	reverse flow in the ductus venosus
RMSD	root mean square deviation
RI	resistance index
RR	relative risk (or risk ratio)
RoB	risk of bias
ROC	receiver operator characteristic
SCBU	special care baby unit
S:D	systolic:diastolic
SD	standard deviation
Sens	sensitivity
SFH	symphysis-fundal height
SGA	small for gestational age
Spec	specificity
SR	systematic review
STOPPIT	Study of Progesterone for the Prevention of Preterm Birth in Twins
TAPS	twin anaemia-polycythaemia sequence
TCTA	trichorionic triamniotic
TENS	Transcutaneous Electrical Nerve Stimulation
TOP	termination of pregnancy
TRAP	twin reversed arterial perfusion
TTFS	twin-to-twin transfusion syndrome
TVUS	transvaginal ultrasound
UA-AREDV	umbilical artery absent/reversed end-diastolic velocity
UK	United Kingdom
US	ultrasound
USA	United States of America
USS	ultrasound scan
VB	vaginal birth
vPROG	vaginal progesterone
VTE	venous thromboembolism