WHO recommendation on the use of antibiotics for the manual removal of retained placenta

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Recommendation

A single dose of antibiotics (ampicillin or first-generation cephalosporin) is recommended if manual removal of the placenta is practised.

(Weak recommendation, very-low-quality evidence)

Publication history

First published: September 2012

Updated: No update planned

Assessed as up-to-date: September 2012

Remarks

- The GDG found no empirical evidence to support recommending the use of uterotonics for the management of a retained placenta in the absence of haemorrhage. The above recommendation was reached by consensus.
- The WHO guide, “Managing complications in pregnancy and childbirth” (WHO, 2007), states that if a placenta is not expelled within 30 minutes after the delivery of a baby, the woman should be diagnosed as having a retained placenta. Since there is no evidence for or against this definition, the delay used before this condition is diagnosed is left to the judgement of the clinician.
- The same WHO guide also suggests that in the absence of haemorrhage, the woman should be observed for a further 30 minutes after the initial 30 minutes, before the manual removal of the placenta is attempted.
- The GDG noted that spontaneous expulsion of the placenta can still occur, even in the absence of bleeding. A conservative approach is therefore advised and the timing of the manual removal of the placenta as a definitive treatment is left to the judgement of the clinician.
- The recommendation regarding the use of prostaglandin E2 is informed by a lack of evidence on this question and also by concerns related to adverse events, particularly cardiac events.
- Direct evidence of the value of antibiotic prophylaxis after the manual removal of the placenta was not available. The GDG considered indirect evidence of the benefit of prophylactic antibiotics from studies of caesarean section and abortion, as well as observational studies of other intrauterine manipulations.
Current practice suggests that ampicillin or first-generation cephalosporins may be administered when
the manual removal of the placenta is performed.

This question was identified as a research priority for settings in which prophylactic antibiotics are not
routinely administered and those with low infectious morbidity

Background

Postpartum haemorrhage (PPH) is defined as blood loss of 500ml or more within 24 hours after birth. PPH is
the primary cause of nearly one-fifth of all maternal deaths globally. Most of these deaths occur during the
first 24 hours after birth. The majority could be prevented through the use of prophylactic uterotonics during
the third stage of labour, and by timely and appropriate management.

The term 'retained placenta' is used when the placenta has not been delivered within one hour after the birth
of the baby (WHO 1990). Retained placenta is a potentially life-threatening complication of the third stage
of labour. If untreated, there is a high risk of maternal death from haemorrhage or infection.

Methods

The recommendation was developed using standardized operating procedures in accordance with the process
described in the “WHO handbook for guideline development”, based on the GRADE approach (1, 2)
Outcomes used for this recommendation were the prioritized outcomes from the WHO recommendations on
prevention and treatment of postpartum haemorrhage (2012).(3)

Trials relevant to the key question were screened by review authors, and data on relevant outcomes and
comparisons were extracted. (4,5) Evidence profiles (in the form of GRADE tables) were prepared for
comparisons of interest.

WHO convened a Guideline Development Group (GDG) meeting in March 2012. This group of independent
experts used the evidence profiles to assess evidence on effects on the pre-specified outcomes. GDG
members discussed the balance between desirable and undesirable effects, overall quality of supporting
evidence, values and preferences, magnitude of effect, balance of benefits versus disadvantages, resource
usage, and feasibility, to formulate the recommendation. Remarks were added to clarify the
recommendation, and aid implementation.

Further information on procedures for developing this recommendation are available here.

Recommendation question

For this recommendation, we aimed to answer the following question:

- For all women with manual removal of the retained placenta (P), does antibiotic administration (I)
  compared to placebo or not treatment (C) improve maternal outcomes (O)?

Evidence summary

No RCTs of antibiotic prophylaxis after the manual removal of the placenta were identified in a systematic
review published in 2012. One retrospective study (550 patients) (Criscuolo JL et al) evaluated prophylactic
antibiotic therapy in intrauterine manipulations (such as forceps delivery, manual removal of the placenta,
and the exploration of the uterus cavity) during vaginal delivery.

Further information on evidence supporting this recommendation are available here.

Implementation considerations

- The successful introduction of evidence-based policies related to the prevention and management of PPH into national programmes and health care services depends on well-planned and participatory consensus-driven processes of adaptation and implementation. These processes may include the development or revision of national guidelines or protocols based on this recommendation.
- The recommendation should be adapted into locally-appropriate documents and tools that are able to meet the specific needs of each country and health service. Modifications to the recommendation, where necessary, should be justified in an explicit and transparent manner.
- An enabling environment should be created for the use of this recommendation, including changes in the behaviour of health care practitioners to enable the use of evidence-based practices.
- Local professional societies may play important roles in this process and an all-inclusive and participatory process should be encouraged.

Related links

WHO recommendations on prevention and treatment of postpartum haemorrhage (2012) - full document and evidence tables

Managing Complications in Pregnancy and Childbirth: A guide for midwives and doctors

Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

Link to supporting evidence


Related resources

VIDEO: Active management of third stage of labour

Education material for teachers of midwifery. Managing postpartum haemorrhage.

Research implications

The GDG did not identify any research priorities related to this recommendation.

References

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Citation:


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