WHO recommendation on cord traction for the removal of the placenta in caesarean section

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Recommendation

Cord traction is the recommended method for the removal of the placenta in caesarean section.

(Strong recommendation, moderate-quality evidence)

Publication history

First published: September 2012

Updated: No update planned for 2018

Assessed as up-to-date: September 2012

Background

Postpartum haemorrhage 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.

It is generally assumed that by preventing and treating PPH, most PPH-associated deaths could be avoided. The prevention and treatment of PPH are therefore vital steps towards improving the health care of women during childbirth and the achievement of the Millennium Development Goals. To reach these objectives, health workers in developing countries should be given access to appropriate medications and be trained in procedures relevant to the management of PPH. Countries also need evidence-based guidance to inform their health policies and improve their health outcomes.

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)
One systematic review provided evidence. (4). Randomized controlled trials relevant to the key question were screened by review authors, and data on relevant outcomes and comparisons were extracted. 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 after caesarean section (P), does cord traction for the removal of the placenta (I) compared to standard care (C) improve maternal outcomes, including postpartum haemorrhage prevention (O)?

**Evidence Summary**

Only one systematic review of 21 randomized controlled trials of women undergoing caesarean section was identified (>5500 women). (4) The review compared the effects of cord traction versus the manual removal of the placenta.

In three studies (1017 women), the manual removal of the placenta was associated with an increased risk of blood loss >1000 ml (RR 1.84; 95% CI 1.48 to 2.29). Nine studies identified an increased operative blood loss associated with the manual removal of the placenta (2087 patients) (MD 79.46 ml; 95% CI 10.9 ml to 148.01 ml). Lower levels of haematocrit after delivery (two studies, 384 women) (MD -1.55%; 95% CI -3.09 to -0.01) and higher maternal haematocrit fall after delivery (seven studies, 2495 women) (MD 1.96%; 95% CI 0.24% to 3.68%) were also associated with the manual removal of the placenta.

In addition, the manual removal of the placenta in caesarean deliveries was associated with an increased risk of endometritis (17 studies, 5026 women) (RR 1.75; 95% CI 1.53 to 2.0).

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.

Research implications

The GDG did not identify any research priority related to this recommendation:

Related Links

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

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

**Managing Complications in Pregnancy and Childbirth: A guide for midwives and doctors (2nd ed)**

**VIDEO: Active management of third stage of labour**

**Education material for teachers of midwifery. Managing postpartum haemorrhage.**

Links to supporting evidence:


References

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