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Postpartum hemorrhage: guidelines for clinical practice from the French College of Gynaecologists and Obstetricians (CNGOF) in collaboration with the French Society of Anesthesiology and Intensive Care (SFAR)

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ABSTRACT

Postpartum haemorrhage (PPH) is defined as blood loss ≥500 mL after delivery and severe PPH as blood loss ≥1000 mL, regardless of the route of delivery (professional consensus). The preventive administration of uterotonic agents just after delivery is effective in reducing the incidence of PPH and its systematic use is recommended, regardless of the route of delivery (Grade A). Oxytocin is the first-line prophylactic drug, regardless of the route of delivery (Grade A); a slowly dose of 5 or 10 IU can be administered (Grade A) either IV or IM (professional consensus).After vaginal delivery, routine cord drainage (Grade B), controlled cord traction (Grade A), uterine massage (Grade A), and routine bladder voiding (professional consensus) are not systematically recommended for PPH prevention. After caesarean delivery, placental delivery by controlled cord traction is recommended (grade B). The routine use of a collector bag to assess postpartum blood loss at vaginal delivery is not systematically recommended (Grade B), since the incidence of severe PPH is not affected by this intervention. In cases of overt PPH after vaginal delivery, placement of a blood collection bag is recommended (professional consensus). The initial treatment of PPH consists in a manual uterine examination, together with antibiotic prophylaxis, careful visual assessment of the lower genital tract, a uterine massage, and the administration of 5–10 IU oxytocin injected slowly IV or IM, followed by a maintenance infusion not to exceed a cumulative dose of 40 IU (professional consensus). If oxytocin fails to control the bleeding, the administration of sulprostone is recommended within 30 minutes of the PPH diagnosis (Grade C). Intrauterine balloon tamponade can be performed if sulprostone fails and before recourse to either surgery or interventional radiology (professional consensus). Fluid resuscitation is recommended for PPH persistent after first line uterotonics, or if clinical signs of severity (Grade B). The objective of RBC transfusion is to maintain a haemoglobin concentration (Hb) >8 g/dL. During active haemorrhaging, it is desirable to maintain a fibrinogen level ≥2 g/L (professional consensus). RBC, fibrinogen and fresh frozen plasma (FFP) may be administered without awaiting laboratory results (professional consensus). Tranexamic acid may be used at a dose of 1 g, renewable once if ineffective the first time in the treatment of PPH when bleeding persists after sulprostone administration (professional consensus), even though its clinical value has not yet been demonstrated in obstetric settings. It is recommended to prevent and treat hypothermia in women with PPH by warming infusion solutions and blood products and by active skin warming (Grade C). Oxygen administration is recommended in women with severe PPH (professional consensus). If PPH is not controlled by pharmacological treatments and possibly intra-uterine balloon, invasive treatments by arterial embolization or surgery are recommended (Grade C). No technique for conservative surgery is favoured over any other (professional consensus). Hospital-to-hospital transfer of a woman with a PPH for embolization is possible once hemoperitoneum is ruled out and if the patient's hemodynamic condition so allows (professional consensus).

Introduction and method [1–3]

The sponsor (the French College of Gynecologists and Obstetricians (CNGOF)) appointed a steering committee (Appendix) to define the exact questions to be put to the experts, to choose them,follow their work and draft the synthesis of recommendations resulting from their work [1]. The experts analyzed the scientific literature on the subject to answer the questions raised. A literature review identified the relevant articles through mid-2014 by searching the MEDLINE database and the Cochrane Library. The search was restricted to articles published in English and French [2,3]. Priority was given to articles reporting results of original research, although review articles and commentaries were also consulted. Guidelines published by organizations or institutions such as the American College of Obstetricians and Gynecologists (ACOG) [4], the Royal College of Obstetricians and Gynaecologists (RCOG) [5], the Canadian Society of Gynecology and Obstetrics (SOGC) [6], the World Health Organization [7] as well as previous guidelines published by the CNGOF [8] were reviewed, and additional studies were located by reviewing bibliographies of identified articles. For each question, each overview of validated scientific data was assigned a level of evidence based on the quality of its data, in accordance with the framework defined by the HAS (French Health Authority) [3], summarized below.

Quality of evidence assessment

LE1: very powerful randomized comparative trials, meta-analysis of randomized comparative trials.
LE2: not very powerful randomized trial, well-run non-randomized comparative studies, cohort studies.
LE3: case-control studies.
LE4: non-randomized comparative studies with large biases, retrospective studies, cross-sectional studies, and case series.

A synthesis of recommendations was drafted by the organizing committee based on the replies given by the expert authors. Each recommendation for practice was allocated a grade, defined by the HAS as follows.

Classification of recommendations

Grade A: Recommendations are based on good and consistent scientific evidence.
Grade B: Recommendations are based on limited or inconsistent scientific evidence.
Grade C: Recommendations are based primarily on consensus and expert opinion.