



Active Management of the Third Stage of Labor: A Simple Practice to Prevent Postpartum Hemorrhage

- *Postpartum hemorrhage (PPH) is the leading direct cause of maternal death in developing countries.*
- *Most cases of PPH occur within 24 hours after delivery.*
- *About 70 percent of cases of PPH are due to uterine atony, which can be prevented with Active Management of the Third Stage of Labor (AMTSL).*
- *Any woman can face life-threatening blood loss at the time of delivery; women with anemia are particularly vulnerable since they may not tolerate even moderate blood loss.*
- *AMTSL reduces the incidence of PPH, quantity of blood loss, need for blood transfusion, and need for medical intervention to stop bleeding.*

Definitions

Postpartum hemorrhage: Excess blood loss after the birth of a baby. The clinical definition is blood loss greater than 500 ml. Severe PPH is blood loss greater than 1000 ml.

Third stage of labor: The time between delivery of the baby and expulsion of the placenta. During this stage the muscles of the uterus contract downward, and the placenta begins to separate from the uterine wall. The amount of blood lost depends on how quickly this occurs. If the uterus does not contract normally (*uterine atony*), the blood vessels at the placental site remain open, and severe bleeding results.

Active Management of the Third Stage of Labor: AMTSL is an effective measure to prevent PPH. AMTSL can be delivered wherever women give birth, including at home, by trained health care providers linked to essential supplies. AMTSL speeds delivery of the placenta by increasing uterine contractions and prevents PPH by averting uterine atony. The components of AMTSL are:

- Administration of a uterotonic agent within one minute after the baby is born;
- After the cord is clamped, delivery of the placenta by controlled cord traction (gently pulling on the umbilical cord) with counter-traction on the fundus;
- Fundal massage after delivery of the placenta.

Uterotonic Drugs: A uterotonic drug stimulates uterine contractions. Routine administration of a uterotonic drug is an integral part of AMTSL and is thought to play the largest role in preventing PPH. Injectable oxytocin is preferred over other uterotonic drugs because it is effective quickly— 2 to 3 minutes after injection; it has minimal side effects, and all women can use it. If oxytocin is not available, other uterotonics may be used, such as injectable ergometrine, injectable syntometrine, or oral misoprostol. Injectable uterotonic drugs require proper storage to retain potency and prolong shelf life.

Note: Nipple stimulation and breastfeeding do not stimulate the release of enough oxytocin to cause significant uterine contraction. Oral oxytocin and oral ergometrine preparations have not been proved effective for AMTSL and are not stable in tropical conditions.

Controlled Cord Traction: Health care providers require training and guidelines to perform controlled cord traction safely. The potential maternal risks associated with controlled cord tension are the risk for the uterus to invert (i.e., to be pulled into the birth canal) and for the cord to separate from the placenta.

In the five major controlled trials on active management, however, no cases of uterine inversion or cord separation were recorded.

Fundal Massage: The fundus of the uterus can be felt through the wall of the abdomen. Gentle massage helps "rub up" a sustained contraction and thus reduces the amount of blood loss.

Other Ways to Prevent PPH: We cannot predict who will experience PPH on the basis of risk factors: up to 90 percent of women who experience PPH have no identifiable risk factors. We do know of several factors that tend to increase risk, however, namely multiple pregnancies, grand multiparity, prolonged labor, augmented labor, routine episiotomy, and general anesthesia. Thus additional clinical and programmatic measures to reduce the occurrence of PPH include use of a partograph to help birth attendants respond appropriately to prolonged or obstructed labor, and policies that discourage routine episiotomy. Treatment of anemia with iron supplementation will not prevent PPH but may help women survive a hemorrhage if it occurs.

Implementation of Active Management of the Third Stage of Labor: AMTSL requires a skilled attendant at delivery. The feasibility of widespread active management requires consideration of the costs, storage, and distribution requirements of drugs and supplies, the availability of training and trained personnel, and the quality of health facilities. Skilled birth attendants can become proficient in AMTSL with a minimum of training. USAID has developed a toolkit that USAID Missions and others can use for program development, which includes clinical guidelines, job aids, detailed information about uterotonic drugs and storage requirements, media tools, and a training module for skilled birth attendants on CD-ROM. Tools are also available to help Missions and host-country governments assess the availability of uterotonics for routine use and to forecast future need. National societies of obstetricians and gynecologists and midwives should be involved in program planning.

Where to get more information: www.maqweb.org

Reference:
PATH. Preventing Postpartum Hemorrhage: Toolkit for Providers. Condensed Version. Washington DC: PATH, 2004.

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