"ROUTINE USE OF OXYTOCIN AT BIRTH: JUST THE RIGHT AMOUNT TO PREVENT POSTPARTUM HEMORRHAGE"
ROBERT L. BARBIERI, MD (EDITORIAL, JULY 2012)

In his July editorial, Dr. Robert L. Barbieri observed that postpartum hemorrhage is a common—and sometimes deadly—obstetric complication and advocated routine use of a uterotonic to reduce this risk. He also invited pearls from readers—and you happily provided them, thank you! Here, we present a collection of your suggestions and the rationales behind them. As Dr. Barbieri notes in response to these letters, the readers of OBG MANAGEMENT have once again demonstrated broad and deep knowledge of an important clinical issue.

Be vigilant for retained placental products

Thank you for the very comprehensive article concerning postpartum hemorrhage. I have worked in many parts of the world and have found it to be a universal problem, especially in places where nonhospital birthing practices are common.

One thing that I have found to be very practical and productive, when I am faced with postpartum hemorrhage, is to promptly evaluate and inspect the uterine cavity for any retained products of conception using a large placental curette. I place one hand on the uterine fundus and gently pass the curette into the cavity. In a matter of 30 to 60 seconds, in a systematic fashion, I evaluate and curette the cavity in a clockwise (or counterclockwise) manner. I then withdraw the curette and begin vigorous uterine massage.

We have all encountered retained products of conception and are acutely aware of how their presence and persistence can alter the success of treatment protocols for postpartum hemorrhage.

Jim Alonzo, MD
New Plymouth, New Zealand

Timing of oxytocin administration is important

Proper use of a uterotonic such as oxytocin can reduce the risk of postpartum hemorrhage and diminish the impact of one of the major causes of maternal mortality, as Dr. Barbieri pointed out. About 40 years ago, I was taught how to use oxytocin properly: Upon delivery of the anterior shoulder, stop the delivery, preventing further exit of the baby. During this interval, suction the baby and administer a prompt bolus of intravenous (IV) oxytocin. Then allow the delivery to proceed slowly, so that the uterus shrinks in volume and permits shearing and separation of the placenta. This approach has served me well as it helps avert a trapped placenta and uterine atony.

I never pull out a placenta that is resistant, unless it is just sitting in the vagina. If the delivery has been managed properly and the placenta does not follow, there is probably a reason, such as placenta accreta.

When placenta accreta does occur, my aim is not to disturb the placenta, which would cause further bleeding. Instead, I pack the uterus and administer methotrexate and an antibiotic to prevent hemorrhage and infection and to preserve the uterus for future pregnancy.

Stefan Semchyshyn, MD
Jonesborough, Tennessee

Give oxytocin upon delivery of the anterior shoulder

I have given 10 U of oxytocin, when possible, upon delivery of the anterior shoulder ever since my training in 1968. I teach the same approach to all students and residents. It helps when I explain the rationale behind the intervention—physicians are more likely to comply. I have found that nurse midwives use oxytocin regularly, with great success, but not all doctors do.

Gabriel F. Nassar, MD
East Point, Georgia

Turn on the lights!

I appreciate Dr. Barbieri's editorship of such a consistently high-quality publication over the years!

My clinical pearl for postpartum hemorrhage: First, turn on the lights!

I have had the experience of being called to see a patient because of concerns about vital signs—usually unexplained tachycardia—only to find the room lights lowered for "bonding" and a large amount of blood on the bed, visible only with adequate lighting. So, "turn on the lights" is my first order.

Maurice Druzin, MD
Stanford, California

Oxytocin may help in some cases, but routine use isn't warranted

Although I appreciated many aspects of Dr. Barbieri's editorial, I am opposed to the "routine" use of anything in medicine. For postpartum hemorrhage, it pays to be aware of the variables that can cause it, to be prepared, and to manage the patient

PHOTO: SHUTTERSTOCK

accordingly. I massage the uterine fundus well immediately after placental delivery.

Alfred L. Franger, MD
Brookfield, Wisconsin

Don't mess with the placenta!

My approach to the prevention of postpartum hemorrhage is simple: Don't mess with the placenta! The less manipulation, the better. I give oxytocin when the placenta appears at the cervical os in vaginal deliveries and when the cord is clamped in cesarean deliveries.

Ramon H. Gonzales, MD
Madisonville, Kentucky

Misoprostol is the key

I administer misoprostol 400 µg rectally after delivery of the placenta. I have used this trick for 3 years and more than 700 deliveries without one case of postpartum hemorrhage.

Richard P. Benedict, MD
Fort Mohave, Arizona

Postpartum infusion of oxytocin averts the need for postpartum hysterectomy

I was surprised to learn, from Dr. Barbieri's editorial, that postpartum use of a uterotonic is not routine in the United States. I trained at Travis Air Force Base here in California in the early 1970s and was taught to give 10 to 20 U of oxytocin in 1,000 mL of IV solution following delivery of the placenta. I have continued that regimen, adding carboprost tromethamine (Hemabate) to the regimen about 10 years ago when hemorrhage persists. Most recently, I started adding 1,000 µg of rectal misoprostol. (Misoprostol is very inexpensive.) I also do not hesitate to administer uterine massage, sometimes placing a hand inside the uterus to facilitate

massage, removing it when the uterus contracts around it.

I guess I am lucky because I have never had to perform postpartum hysterectomy after more than 10,000 deliveries.

Doug Tolley, MD
Yuba City, California

IV infusion of oxytocin has worked for 20+ years

For more than 20 years, I have administered oxytocin by IV infusion immediately after delivery. I give 20 to 30 U of oxytocin in 1 L of saline at a rate of at least 125 mL/h. This approach has reduced the incidence of immediate and delayed postpartum hemorrhage due to uterine atony to virtually nil without increasing the incidence of retained products of conception.

Henry Moon, MD
Sanford, Michigan

Any information on injecting oxytocin into the cord?

I once had a student who suggested that oxytocin be injected into the umbilical cord after clamping. I decided to try this approach and started injecting 10 U into the cord. I have been unable to find any information on this method, but it seems to reduce blood loss. It would be a fairly easy study to conduct—and I'd love to see the data. Until then, I will continue injecting oxytocin into the cord. It seems to work!

Patricia Boullie, CNM
Astoria, Oregon

›› Dr. Barbieri responds

Kudos to our community of expert clinicians

As these letters demonstrate, the readers of OBG MANAGEMENT *are a community of outstanding clinicians who have vast clinical experience and broad and deep knowledge about optimal approaches to obstetric problems.*

I agree with Dr. Alonzo that having a large "banjo" curette available in all birth units provides a quick and effective tool for finding and removing retained placental products, which are a common cause of postpartum bleeding. In an unanesthetized woman, this approach might cause some discomfort.

Dr. Semchyshyn elegantly describes the integration of oxytocin infusion with a multistep birth process. He agrees with Dr. Nassar that the optimal timing of oxytocin administration is with the delivery of the anterior shoulder.

I appreciate the innovative report from Dr. Benedict on the use of rectal misoprostol as the primary agent to enhance uterine contractility. Ms. Boullie provided another innovative description of the injection of oxytocin into the umbilical cord and asks about the evidence for or against this practice. A Cochrane systematic review concluded that the injection of oxytocin into the cord is not more effective than the injection of saline and recommended against this technique.[1]

As Dr. Tolley and Dr. Moon note,

the most common approach to active management of the third stage of labor in the United States is to start an IV infusion of a solution containing 10 to 30 U of oxytocin per liter at a rate of about 125 mL/h.

Dr. Gonzalez and Dr. Druzin provide very useful advice: Avoid unnecessary manipulation of the placenta until it begins to deliver, and turn on the lights to ensure that we can employ all our senses optimally when an obstetric problem arises.

I share Dr. Franger's advocacy for individualized care and simultaneously wonder if quality and safety can best be improved by reducing variation and by standardizing processes.

The quality of the clinicians in our obstetric community ensures that pregnant women will receive the exceptional care that they deserve and need.

Reference

1. Mori R, Nardin JM, Yamamoto N, Carroli G, Weeks A. Umbilical vein injection for the routine management of third stage of labour. Cochrane Database Syst Rev. 2012;3:CD006176.

"WHEN CAN MRI MAKE THE DIFFERENCE FOR YOU IN DIAGNOSING A GYN ABNORMALITY?"
DEBORAH LEVINE, MD (JULY 2012)

Don't jump to expensive technology unless you have fully utilized the basics

I read with great interest Dr. Levine's article, which happened to drop into my email inbox the very same day that I ordered magnetic resonance imaging (MRI) for a 17-year-old girl who had a pelvic abscess (partially drained through interventional radiology).

Dr. Levine presented an MRI image of a 10-cm fatty tumor that had been misread as a 3.4-cm ovary via ultrasonographic (US) imaging. In the US image, the delineation of the tumor (missed by the sonographer) is clearly visible. I would like to stress, as Dr. Levine did, the value of US in assessing the female pelvis and advise clinicians against falling into the trap of replacing sonographic skills with expensive MRI technology.

Pelvic MRI should be ordered only once it has been determined that the pathology was not, or could not have been, well evaluated by US. That means that one should consider repeating the US with the aid of a skilled sonographer or radiologist or with a gynecologist (yourself, ideally) present in the room, watching the scan "live" rather than looking at still images later. Some clinical pearls can only be discovered during the performance of US and cannot be reproduced in a still image—for example, pain during the scan, or movement of structures.

To better utilize our health-care dollars, we really should think about maximizing our clinical skills and getting the most from basic technology before jumping into expensive, high-tech studies.

Jose Carugno, MD
Orlando, Florida

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