Manual vacuum aspiration technique draws interest

January 1, 1999

(Editor’s note: This is the second of a two-part series on abortion options. In the December 1998 issue, we provided information on mifepristone and methotrexate. The following article includes information on manual vacuum aspiration use in early abortions.)

Providers are looking at manual vacuum aspiration (MVA) with renewed interest for use in very early pregnancy termination, as well as for a backup method for mifepristone and methotrexate forms of medical abortion.

MVA is a nonelectric vacuum aspiration technique for removing uterine contents, using suction provided by a handheld syringe. It is indicated for use in endometrial sampling, first-trimester abortions, and incomplete abortions, says Forrest Greenslade, PhD, president of Ipas in Carrboro, NC. Ipas manufactures and distributes MVA instruments on an international basis and supplies an array of educational materials on reproductive health, including MVA and postabortion family planning.

MVA has been used as an abortion method for many years, so the technology is not unknown. However, a protocol for very early abortion, confirmed in research published by Jerry Edwards, MD, formerly with Planned Parenthood of Houston and Southeast Texas, has led to a higher profile for MVA, Greenslade says.

Providers who are considering offering medical abortion, whether it be with off-label use of methotrexate or mifepristone, which still awaits its U.S. introduction, should consider MVA as a backup for method failures. Many providers who have participated in U.S. studies of mifepristone and methotrexate learned MVA as a backup method and now continue to offer it as an option, says Ann Gerhardt, MPH, U.S. marketing associate for Ipas.

"The message is that clinicians should have this in addition to medical abortion for accessible, confidential services," Greenslade says. "The issue isn’t [just] medical abortion. It’s moving to
an array of services to make earlier abortion less centralized and to offer more choices to women."

**Look at the protocol**

The MVA protocol researched by Edwards, now with Baylor College of Medicine in Houston, combines the use of the manual vacuum with vaginal ultrasound and modern human chorionic gonadotropin (HCG) quantitative analysis technology to safely perform abortion procedures as soon as the pregnancy test becomes positive, which is about eight days after conception.

Providers were concerned about performing very early suction procedures during the 1970s and 1980s because pregnancy tests at that time did not register positive results early, which delayed most abortions until seven weeks, says Edwards. Many providers performed early abortions under suspicion of pregnancy. Such early terminations were associated with more discomfort and pain, he notes.

With the development of ultrasensitive urine HCG tests, though, providers are able to determine pregnancy more accurately. The use of ultrasound before and after the MVA process allows the clinician to identify the gestational sac and ensure it has been removed for a complete abortion. It is important that the sac be identified and that women understand an additional visit may be required for serum HCG testing to make sure that the pregnancy has been successfully terminated, says Nancy Meyers, MA, SWA, study coordinator at Planned Parenthood of Houston and Southeast Texas.

The MVA protocol also allows for the identification of undetected ectopic pregnancies. By safely diagnosing the ectopic pregnancy, followed with medical abortion using methotrexate, women are spared the potential hazards associated with ectopic pregnancies. "We have detected ectopics, and we have referred, and a very minimal amount of them have had to have surgery," notes Meyers. "That is a big advantage of doing it early."

Before providers consider implementing abortion services, they need to check with attorneys in understanding the state-by-state restrictions in abortion care, says Susan Dudley, deputy director of the National Abortion Federation in Washington, DC, a national association for abortion providers. Some states allow only providers at the MD level to perform abortions, while others sanction training for midlevel clinicians.

The MVA procedure has a slightly different feel than using electric suction, so even clinicians with plenty of first-trimester experience still need to do a few under supervision to gain competency, says Carolyn Westhoff, MD, DSc, medical director of family planning at Columbia Presbyterian Medical Center and associate professor of clinical OB/GYN and public health at Columbia University, both in New York City. (See box, at right, for training information.) "In general, one needs to be comfortable and competent emptying a pregnant uterus, plus be familiar with the equipment," she says. "Clinicians who do not have experience with doing abortions under totally local anesthesia also need that skill."
For any abortion procedure, counseling plays an important role in providing safe, legal, patient-centered care. Counseling for very early abortion using MVA must include the fact that patients may need to return for further HCG testing if the gestational sac cannot be identified following the procedure. Other issues covered in any abortion counseling include options (such as carrying the birth to term, keeping the baby, adoption placement), as well as birth control.

Women who discover that abortion can be offered so early in their pregnancies often choose MVA, says Meyers. Many appreciate the absence of noise associated with electric suction procedures.

"You can only imagine that people know that this is one of the toughest decisions they will ever have to make," says Meyers. "Anything that can be made easier, not hearing the noise, knowing it can be done very, very early, they are ecstatic about it."

Reference