



## Manual vacuum aspiration

### Description

Manual vacuum aspiration (MVA) can be used to treat a number of maternal health conditions and procedures, such as miscarriage, spontaneous abortion, and removal of retained products from an induced abortion, as well as for conducting first trimester abortions (including menstrual regulation) and endometrial biopsies. MVA allows for evacuation of the uterus using a hand-held plastic aspirator attached to a cannula (a thin tube) and is manually activated to suction and remove uterine contents. MVA is appropriate for treatment of incomplete abortions for uterine sizes up to 12 weeks from the last menstrual period. MVA is similar to another method of vacuum aspiration, electric vacuum aspiration (EVA). The two methods share a mechanism of action—removing uterine contents with suction force—yet EVA uses an electric aspirator in place of the manually activated suction used in MVA. This manually activated suction feature allows for use in remote areas where electricity may not be available and facilitates portability.

MVA is safe, effective, portable, easy to use, and reusable. It is appropriate for use in many different clinical settings (including developing-country outpatient centers), does not require lengthy training for proper operation (to facilitate services by mid-level providers), and has yielded both high patient and provider satisfaction.<sup>1,2</sup>

### Efficacy

MVA has been demonstrated to be effective and very safe through clinical studies over the last 30 years. WHO now recommends MVA as the preferred method of uterine evacuation.<sup>3</sup> When compared to other methods for similar procedures, such as dilation and curettage (D&C) and EVA, manual vacuum aspiration is a safer, more readily accessible, and potentially less expensive way to offer high-quality services to women.

Studies demonstrate that the efficacy of MVA is comparable to EVA and is successful in approximately 99 percent of cases for early elective abortion and management of early pregnancy loss. Studies show that 98 percent of vacuum aspiration procedures occur without complications, much lower than the alternative D&C method, which may induce incidences of excessive blood loss, pelvic infection, cervical injury, and uterine perforation.<sup>4</sup>

### Current program/sector use

Vacuum aspiration is used for about 97 percent of first-trimester abortions in the United States. The United Kingdom, Canada, China, New Zealand, Singapore and other countries use this method for most of their first-trimester surgical abortions.<sup>5</sup> In many developing countries, such as Bangladesh and Vietnam, MVA has been used for several decades to provide early abortion.

Globally, since the 1960s, MVA has become the surgical method of choice. In some settings it is also used in conjunction with medical abortion if there is a concern that the uterus has not been completely evacuated.

### **Manufacturer/supplier**

MVA is available in many countries. Many governments have identified MVA in clinical guidelines as the preferred method for uterine evacuation as well as in order to ensure adequate and reliable supplies of MVA instruments in their public health systems. There are a number of MVA products and product manufacturers available, and some efforts have been made to assess and document their relative quality.<sup>6</sup>

One of the major producers of MVA equipment for both international and domestic markets is Ipas. Ipas is an international organization that works to increase women's ability to exercise their sexual and reproductive rights, and to reduce abortion-related deaths and injuries. Ipas can be reached at the following address: PO Box 5027, Chapel Hill, NC 27514 USA. Telephones: (919) 967-7052, and (800) 334-8446 (toll-free in the United States).

### **Registration status**

MVA and MVA products are registered in a variety of countries throughout the world as accepted clinical procedures and approved medical devices. Each country defines the nature and limits of this registration.

### **Public-sector price agreements**

None.

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<sup>1</sup> Manual vacuum aspiration—frequently asked questions page. Ipas website. Available at: [www.ipas.org/Library/FAQs/Manual\\_Vacuum\\_Aspiration\\_-\\_Frequently\\_Asked\\_Questions.aspx?ht](http://www.ipas.org/Library/FAQs/Manual_Vacuum_Aspiration_-_Frequently_Asked_Questions.aspx?ht). Accessed September 5, 2008.

<sup>2</sup> World Health Organization (WHO). 2003. *Safe abortion: Technical and policy guidance for health systems*. Geneva: WHO.

<sup>3</sup> *Ibid.*

<sup>4</sup> Cates WJ, Grimes DA. Morbidity and mortality of abortion in the United States. In: Hodgeson, JE ed. *Abortion and sterilization: Medical and social aspects*. London: Academic Press; 1981.

<sup>5</sup> Baird TL, Flinn SK. (2001). *Manual Vacuum Aspiration: Expanding Women's Access to Safe Abortion Services*. Chapel Hill, N.C.: Ipas; 2001.

<sup>6</sup> Girvin S, Ruminjo J. An evaluation of manual vacuum aspiration instruments. *International Journal of Gynecology & Obstetrics*. 2003;83(2):219–232.

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