

Manual Compared with Electric Vacuum Aspiration at Less Than 6 Weeks of Gestation



A 2015 [study](#) published in *Obstetrics & Gynecology* from researchers at Planned Parenthood of New York City (now Planned Parenthood of Greater New York) compared the effectiveness of two devices used for abortion – manual vacuum aspiration and electric vacuum aspiration – in patients with very early pregnancies (six weeks or less). **Researchers found both devices are safe and effective for very early abortion, both devices provide tissue samples that enable accurate identification of completed abortion, and doctors and trained medical assistants are equally capable of identifying a completed abortion. Most importantly, this study showed that surgical abortion at less than six weeks gestation is safe and effective, even before the pregnancy can be identified on ultrasound.** This study fills an important gap in understanding the effectiveness of very early abortion surgical procedures.

For more on this study and Planned Parenthood research, go to plannedparenthood.org/research.

About Surgical (or In-Clinic) Abortion:

- A surgical abortion, also called an in-clinic abortion, uses gentle suction to empty the uterus. The most common type is called a vacuum aspiration. It's usually used until about 14-16 weeks after the patient's last period.
- Providers can use a hand-held syringe to complete a manual vacuum aspiration or an electric device to complete an electric vacuum aspiration.
- The manual vacuum aspirator is more portable, less expensive, and quieter compared to the electric vacuum aspirator. However, the electric vacuum aspiration provides continuous suction, without any potential pauses in the procedure.
- Both types of aspirators are used interchangeably for surgical abortion.

The Study

- Researchers randomly assigned 500 patients seeking to end early pregnancies via surgical abortion to either manual or electric vacuum aspiration at Planned Parenthood of New York City.
- Researchers were interested in whether one device showed better results than the other for early surgical abortion, including for collecting tissue samples to allow immediate identification of a completed abortion – meaning all pregnancy tissue was removed during the procedure.
- Both doctors and medical assistants examined the pregnancy tissue that was removed to confirm a completed abortion.
- If providers could not identify all of the pregnancy tissue, pregnancy hormone was measured on the day of the abortion and 2-3 days later as another way to confirm completed abortion.
- Patients were scheduled for routine follow-up 2-3 weeks after the initial visit. A pregnancy test was conducted at these follow-up visits to confirm again that the abortion was complete.



Who Participated

- Participants were ages 18 and older. The average age was **25** years in both the manual and electric aspiration groups.
- About one third of participants identified as Hispanic in both groups (**39% and 35%**) and about one third of participants identified as Black in both groups (**37% and 35%**).
- About one third of participants in both groups had a prior vaginal delivery (**36% and 34%**).
- About two thirds of participants in both groups had a previous abortion (**67% and 60%**).
- More than half of participants in both groups had never previously given birth.

The Results

- Both manual and electric methods of early surgical abortion were safe and highly effective (**98-99%**).
- Both methods led to high rates of positive detection of completed abortion by all trained staff, with **90%** agreement between physicians and medical assistants.

To read the full research study, click [here](#).

