

## **MIFEPRISTONE VS. OSMOTIC DILATOR INSERTION FOR CERVICAL PREPARATION PRIOR TO SURGICAL ABORTION AT 15-18 WEEKS**

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Cervical preparation is strongly recommended before second trimester surgical abortion. To perform a surgical abortion, the cervix needs to be open enough for instruments to pass through the cervix and into the uterus. There are several ways of doing this. Arguably, the most common way is to use osmotic dilators overnight. These are “sticks” which are placed in the cervix and swell up slowly, opening the cervix. Placing them requires a speculum procedure (pelvic examination) and can be painful. Clinicians vary in their practices, from using nothing for pain to using sedation and anesthesia. Overnight the dilators may also cause pain.

Another disadvantage of using osmotic dilators in the traditional way is that it requires a separate visit. “Same-day” procedures are attractive for women who have to travel for abortion services. The medication misoprostol has been used, and although opinions vary, it is most effective when used at least 3 hours before the abortion. In addition, it doesn’t give as much dilation as overnight dilators. Same-day osmotic dilators also have some enthusiastic proponents, this technique also requires several hours and an additional pelvic examination. There is not as much data about this method in comparison to other methods.

We wanted to develop a method that would avoid the pelvic examination and procedures, which are universally disliked by women, but that would be as effective as overnight osmotic dilators. We structured this as a “non-inferiority” study, designed to determine whether the new method was no worse than overnight osmotic dilators. We assigned women randomly to use either overnight dilators, or medication. The medication method was to have the woman take one pill of mifepristone (200 mg) the day before the abortion, and on the morning of the abortion she used misoprostol (400 mcg, buccally) two hours before the abortion.

The main outcome was the time it took to do the abortion procedure. We found that procedures for women with medication for cervical preparation didn’t take any longer. Actually, they were a bit shorter. Doctors assessed the difficulty of each procedure, and the ratings were the same for both methods. Women were asked about their symptoms the night before and on the day of abortion. The women with dilators had more pain and bleeding overnight. After the abortion, women were asked which method they would choose if they had to have another abortion. The majority of women in both groups said that they would rather have medication.

We feel that this method is another option for women, which may be more comfortable and is desirable at least to some women. As this is a small study, there is still uncertainty about the best timing for the medication on the day of the abortion and some other aspects of use. However, it doesn’t require a pelvic procedure the day before the abortion. It might be particularly useful for women who are particularly averse to a pelvic procedure (such as very young women, or women who have been traumatized). As abortions are provided in many different settings, this may be a good option for some services, and not suitable for others. Perhaps most importantly, we are convinced that this line of investigation is important. In the quest for improved methods, speed is certainly a factor, but we feel that comfort and acceptability should be considered as well, and this is not a one-size-fits-all situation.