In this study we compared two methods of cervical preparation before second trimester surgical abortion at between 14 and 16 weeks: One is the insertion of osmotic dilators, usually performed the day before abortion, which provides primarily mechanical dilation. The other is use of buccal or vaginal misoprostol placed one or several hours prior to abortion. Using mifepristone the day prior to abortion would avoid some disadvantages of osmotic dilators, including the discomfort of osmotic dilators and the need for a separate insertion procedure.

This project was a randomized controlled trial of cervical preparation for women requesting surgical abortion at 14-16 wee. 24 hours prior to surgical evacuation, one groups of women received osmotic dilators and the other group received 200 mg mifepristone orally. The primary outcome was the length of the surgical procedure. Procedure length was expected to be longer in the mifepristone group and a difference of 3 minutes was postulated to be a clinically evident change, so the study was designed to show whether mifepristone was associated with a longer procedure by at least 3 minutes. A clinically evident prolongation of the procedure would make it undesirable to both the operator, and the woman. However, since the length of the procedure is only one aspect of acceptability, we also assessed side effects after both dilators and mifepristone. We expected that women would have more bothersome side effects after osmotic dilators, based on our own experience. Finally, we asked both staff and patients about their opinions of the methods.

Fifty women were enrolled. The median length of the procedure was 7 minutes in the dilator group and 10 minutes in the mifepristone group. Most women in the mifepristone group required some mechanical dilation (an additional surgical step) but the ease of procedure ratings were similar. Overnight cramping occurred in 80% of the dilator group and 36% of the mifepristone group. Overnight bleeding was more common in the dilator group, 64% vs. 4%. Overnight nausea and/or vomiting occurred in 52% and 60% respectively. In both groups, women preferred the mifepristone technique and would choose it if given the choice.

Conclusions:

Procedure after mifepristone took 3 minutes longer than procedure after osmotic dilators, within the acceptable range. Side effects were more frequent and more severe after dilator use. Mifepristone was preferred by women. Both staff and women thought that mifepristone should be available.