In the United States first trimester surgical abortions are performed using vacuum aspiration. The ideal pain regimen for this procedure is unclear. Most women undergo first trimester surgical abortion with a regimen consisting of preoperative non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, and intraoperative anesthetic, such as lidocaine, that is administered directly near the cervix. Our study investigated the analgesic efficacy of locally administered ketorolac, a potent NSAID that is usually administered by injection into a vein or a large muscle, as a paracervical block in combination with lidocaine.

We conducted a randomized clinical trial of 50 subjects (25 subjects in each treatment group) who received either preoperative ibuprofen and locally administered lidocaine only or placebo, an inactive pill that appears similar to ibuprofen but without any effects, and locally administered combined mixture of lidocaine and ketorolac. Our findings indicate that women who received the combined mixture of lidocaine and ketorolac experienced less pain after cervical dilation compared to those who received preoperative ibuprofen and locally administered lidocaine alone. There were no other differences noted including post-operative pain nor total satisfaction with pain control.

Our results suggest that administration of locally administered combined mixture of lidocaine and ketorolac may improve pain control during first trimester surgical abortion. This regimen may improve the quality of care received by women seeking abortion services. Our results also suggest that this regimen may improve pain control associated with other gynecologic procedures that require cervical dilation.