

## **Paracervical Block**

**Goal:** To practice the feeling and orientation of placing a paracervical nerve block for pain reduction prior to cervical dilation.

**Description:** A paracervical block is a series of lidocaine injections around the cervix. The cervix is innervated from T11 and T12. Cervical dilation pain is transmitted through parasympathetic nerve fibers alongside the cardinal ligament and uterine vessels. Alternatively, uterine contraction pain is transmitted through sympathetic nerve fibers in the hypogastric and superior hypogastric plexus into the posterior roots of the spinal cord. The paracervical block serves to interrupt nerve transmission in these pathways at the inferior hypogastric plexus which is located in the uterosacral ligament on either side of the cervix in the lateral vaginal fornices. Paracervical blocks can be utilized in any procedure requiring cervical manipulation, dilatation, biopsy or ablation.

### **Supplies:**

- a. 1 assembled ***Pelvic Model***
- b. 1 speculum
- c. 1 tenaculum
- d. 1 10cc syringe
- e. 1 spinal needle
- f. Cup of water (anesthetic)

### **Steps:**

1. Prepare the lidocaine syringe with 20 mL of 1% “lidocaine” (water) and a spinal needle
2. Place the speculum into the model and visualize the cervix
3. Perform cervical antiseptic prep (betadine or chlorhexidine)
4. Inject 1 mL of “lidocaine” into the anterior lip of the cervix where the tenaculum will be placed (12 o’clock position)
5. Use the tenaculum to grasp the anterior lip of the cervix (12 o’clock position)
6. Manipulate the cervix to visualize bilateral cervico-vaginal spaces
7. Inject 5cc of lidocaine into the lateral fornices at the 10, 2, 4 and 8 o’clock positions to a depth of 1-1.5 cm
  - o Be sure to pull back prior to injection to ensure needle is not intravascular
8. Remove all tools from the model

## Performance Checklist

<b>Paracervical Block</b>
Tenaculum at anterior lip
Move tenaculum to visualize bilateral cervico-vaginal spaces
Properly place injection at 4 o'clock and 8 o'clock positions on the cervix
Pull back prior to injection to ensure needle is not intravascular
Administer 5 cc of saline

## Citations:

- “Anesthesia and Analgesia for Office Gynecological Procedures” from Obgyn Key. <https://obgynkey.com/anesthesia-and-analgesia-for-office-gynecological-procedures/>
- “Paracervical block for pain control in first-trimester surgical abortion: a randomized controlled trial” by Renner, R. et al. <https://pubmed.ncbi.nlm.nih.gov/22525915/>
- “Pain relief using paracervical block in patients undergoing manual vacuum aspiration of uterus” by Egziabher, E. et al. <https://pubmed.ncbi.nlm.nih.gov/12635758/>