POLICY STATEMENT
This protocol is for the provision of local anesthesia for **office based** gynecologic procedures and management of gynecologic and chronic pain issues including trigger point injections and paracervical, intracervical blocks, and pudendal nerve blocks.

BACKGROUND
Women who undergo outpatient gynecological procedures experience discomfort during cervical manipulation and cervical dilation, uterine distension, uterine contractions (caused by endometrial biopsy, polypectomy or ablation) or tubal manipulation (transcervical sterilization). Each of these sensations is managed by the complex innervation of the uterus, cervix, fallopian tubes and endometrium.

Adequate pain management requires using the right equipment and a multimodal approach to reducing pain for your patients including creating a calm and relaxing environment in clinic and using multiple interventions to reduce pain including local anesthesia. The table below lists approximate pain scores but these may vary and be higher or lower based on patient race, ethnicity, personal circumstance and other factors.

<table>
<thead>
<tr>
<th>Table 1: Average Pain Scores on Visual Analog Scale (0-100mm)</th>
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<tbody>
<tr>
<td>Endometrial Biopsy</td>
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<tr>
<td>Intrauterine device insertion</td>
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<tr>
<td>Colposcopy</td>
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<tr>
<td>Diagnostic Hysteroscopy</td>
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<tr>
<td>Hysteroscopic bilateral tubal occlusion</td>
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CHOOSING A LOCAL ANESTHETIC

Local anesthetics are classified based on their structure as either amides or esters. Amides are metabolized mainly in the liver while esters are metabolized by choliesterases in the plasma. There is a slight increase in allergic potential to the metabolites of esters. Both Lidocaine and Bupivicaine (Marcaine) are amides and metabolized in the liver.

<table>
<thead>
<tr>
<th>Agent</th>
<th>Concentration mg/mL</th>
<th>Maximum dose mg/kg</th>
<th>Weight based dose</th>
<th>Signs and symptoms of toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% Lidocaine</td>
<td>10 mg/mL</td>
<td>4.5</td>
<td>Example:</td>
<td>Mild: Restlessness, tinnitus, perioral numbness, seizures, unconsciousness.</td>
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<td>For a 50 kg (110 lb) patient Maximum total volume for injection: 22.5 mL or cc Maximum total dose: 225 mg</td>
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<tr>
<td>2% Lidocaine</td>
<td>20 mg/mL</td>
<td>4.5</td>
<td>Example:</td>
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<tr>
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<td>For a 50 kg (110 lb) patient Maximum total volume for injection: 11.25 mL or cc Maximum total dose: 225 mg</td>
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<tr>
<td>1% Lidocaine with Epineprine</td>
<td>10 mg/mL</td>
<td>7</td>
<td>Example:</td>
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<td>For a 50 kg (110 lb) patient Maximum total volume for injection: 35 mL or cc Maximum total dose: 350 mg</td>
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<tr>
<td>0.25% Bupivicaine (Marcaine)</td>
<td>2.5 mg/mL</td>
<td>2</td>
<td>Example:</td>
<td>Cardiotoxic: above plus hypotension, VTach, VFib, complete AV block</td>
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<td>For a 50 kg (110 lb) patient Maximum total volume: 40 mL Maximum total dose: 100 mg</td>
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TOXICITY:
Vascularity of the tissue effects the speed of absorption and likelihood of toxic effects of local anesthetic agents. Cardiotoxic effects of Bupivicaine have been reported when therapeutic doses are inadvertently injected intravascularly.
- Both addition of epinephrine to the local anesthetic and aspiration prior to injection, decrease the risk of toxicity.
- If a patient reports any symptoms of toxicity during injection, the administration should be paused until appropriate dosing and extravascular injection can be confirmed.
- Seizures induced by overdose or intravascular injection should be treated with a benzodiazepine.

DOCUMENTATION:
The patient should be consented for the procedure and a discussion of risks of anesthesia should be included. Risk of discomfort, pain despite local anesthesia use and possible toxicity associated with intravascular injection should be discussed with regard to the local anesthetic agent.
PREPARATION AND ADMINISTRATION OF LOCAL ANESTHESIA BLOCK

I. PARACERVICAL BLOCK WITH 1% LIDOCAINE

1. Steps to prepare the PCB for procedures in non-pregnant patients
   a. Based on clinic/pharmacy protocol the provider or other approved clinic personnel will draw up and administer the PCB in the room where the procedure occurs.
   1. The following should be brought into the room and the block prepared based on the patient’s weight:
      i. 10-20 mL of 1% lidocaine
      ii. 20 mL syringe
      iii. Alcohol swabs to wipe vials
      iv. Blunt needle to withdraw lidocaine
      v. Spinal needle to inject lidocaine

2. One method for PCB administration (clinicians may choose an alternative method based on their experience)
   a. Once the cervix is well visualized, it is cleaned with betadine x 3
   b. 1 cc of the solution is injected on the anterior lip of the cervix at 12 o’clock to decrease pain with tenaculum placement.
   c. A single tooth tenaculum is placed at 12 o’clock.
   d. Cervical manipulation with the tenaculum is used to expose the cervicovaginal junction at 4 and 8 o’clock.
   e. The spinal needle should be advanced approximately 3 cm from the cervicovaginal junction and aspirated to ensure no intravascular injection.
   f. 9.5 ccs of the 1% lidocaine are injected on each side.

II. INTRACERVICAL BLOCK WITH 1% LIDOCAINE

1. Steps to prepare the ICB for procedures in non-pregnant patients
   a. The provider or other approved clinic personnel will draw up and administer the ICB in the room where the procedure occurs.
   2. The following should be brought into the room and the block prepared based on the patient’s weight:
      i. 10 mL of 1% lidocaine, plain
      ii. 10 mL syringe
      iii. Alcohol swabs to wipe vials
      iv. Blunt needle to withdraw lidocaine
      v. Spinal needle to inject lidocaine

2. One method for intracervical administration (clinicians may choose an alternative method based on their experience)
   b. Once the cervix is well visualized, it is cleaned with betadine x 3
   c. 1 cc of the solution is injected superficially on the posterior lip of the cervix at 6 o’clock.
   d. Prior to injection, the tissue should be aspirated to ensure no intravascular injection.
   e. Injection is continued around the cervical face, injecting 1 cc at each point.
III. TRIGGER POINT INJECTION WITH 0.25% MARCAINE

1. Steps to prepare the block
   
   3. The provider or other approved clinic personnel will draw up and administer the Marcaine in the room where the procedure occurs.
   
   4. The following should be brought into the room and the block prepared based on the patient’s weight:
      
      i. 5-10ccs of 0.25% Marcaine, depending on number of injections planned
      ii. 10 mL syringe
      iii. Alcohol swabs to wipe vials
      iv. Blunt needle to withdraw Marcaine
      v. 25 or 27 gauge 1.25 inch IM or spinal needle to inject Marcaine (appropriate length for depth of trigger point)

2. One method for trigger point administration (clinicians may choose an alternative method based on their experience)
   
   1. Point of maximal tenderness is identified with palpation
   2. Skin above point is cleaned with alcohol swab
   3. Advance the needle through the skin to the appropriate depth as noted by painful response
   4. Prior to the injection, the tissue should be aspirated to ensure no intravascular injection.
   5. Inject 1-5 cc of 0.25% Marcaine into center of the painful area.

IV. PUDENDAL NERVE BLOCK WITH 0.25% MARCAINE

Steps to prepare the block

1. The provider or other approved clinic personnel will draw up and administer the Marcaine in the room where the procedure occurs.

2. The following should be brought into the room:

   i. 10 ccs of 0.25% Marcaine
   ii. Pudendal nerve block tray, which includes the following
       1. 10cc syringe
       2. spinal needle
       3. trumpet
       4. collar (used for trigger point injections of pelvic floor muscles)
       5. 1.5 in 24-gauge needle
       6. Sterile gauze
   iii. Blunt needle to withdraw Marcaine

Method for Administration

1. Palpate the ischial spine through a vaginal approach
2. Place trumpet 1 cm superior and medial to the ischial spine
3. Insert needle through trumpet and advance the needle to maximal depth allowed by the trumpet
4. Prior to the injection, the tissue should be aspirated to ensure no intravascular injection.
5. Inject 5 cc of 0.25% Marcaine
6. Inspect for bleeding
7. Repeat the same 6 steps for the contralateral side
V. OTHER LOCAL ANESTHESIA FOR OFFICE PROCEDURES

Applies to vulvar biopsies, Bartholin cyst I&D, marsupialization etc.

1. 1% Lidocaine plain drawn up as above and used in volumes based on patient’s weight as listed above. Lidocaine may be used with or without epinephrine, except near the clitoris where epinephrine should not be used.

2. Preanesthetize skin with EMLA cream (Lidocaine/prilocaine). Cover with occlusive such as telfa for at least 30 minutes prior to lidocaine injections.

3. Clean skin with Betadine

4. Use a 27-30 gauge needle

4. Inject 1-3 cc 1% lidocaine subepidermally. For Bartholin cyst/abscess, injection should be very superficial to prevent puncturing cyst.

REFERENCES


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<tr>
<th>SOP # / Version #</th>
<th>Effective Date</th>
<th>Supersedes</th>
<th>Review Date</th>
<th>Summary of Change(s)</th>
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Title: Local Anesthesia for Office Based Gynecological Procedures
Owner: Division of Family Planning/Department of Obstetrics and Gynecology
Effective Date:
Doc. #1