Pain & First Trimester Surgical Abortion

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• Ipas Clinical Consultant
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• Author of cited literature

Acknowledgments:
- Regina Renner, MD, MPH
  University of British Columbia
Optimal Regimen?

Choice

Safety

Resource

Donati 1996; Clark 2002; Allen 2006; WHO 2013
Pain Control Systematic Review

Total number of studies: 2725

Included studies:
- Local anesthesia
  13 studies (1961 women)
- Conscious sedation
  3 studies (274 women)
- Premedication
  GA
  7 studies (770 women)
- Analgesia
  1 study (100 women)
- General anesthesia
  14 studies (1812 women)
- Non-pharmacological
  4 studies (214 women)

Languages: English, French, Italian

Excluded studies
29 for methodological reasons (randomization/allocation/outcomes)
remaining studies for not meeting multiple inclusion criteria

Included studies: 40* (5131 women)

* sum of studies is more than 40, since some had several arms

2009 Renner, et al Cochrane
<table>
<thead>
<tr>
<th>What Works?</th>
<th>What Doesn’t?</th>
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<tbody>
<tr>
<td>• Paracervical block</td>
<td>• Paracetamol</td>
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<tr>
<td>• NSAIDS</td>
<td>• Oral Anxiolytics</td>
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<tr>
<td>• 4% Intrauterine lidocaine infusion (+PCB)</td>
<td>• Oral opioids</td>
</tr>
<tr>
<td>• PCB w/ Ketorolac/lidocaine</td>
<td>• Doulas</td>
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<tr>
<td>• Moderate Sedation</td>
<td>• Hypnosis</td>
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<td></td>
<td>• Cervical priming/prep</td>
</tr>
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<td></td>
<td>• Nitrous oxide</td>
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Renner Obstet Gynecol 2012; Allen & Singh Contra 2018; Renner 2009 Cochrane; Chor 2015 AJOG; Karasahin 2013 Contra; Aksoy 2016 J Obstet Gynecol; Micks 2012 Obstet Gynecol; Agostini 2012 Contra; Singh 2017 Contra
Pre-Procedue Oral Narcotics: NO Effect on Pain

![Graphs showing pain scores during procedures](image)

**Early GA Pain Scores During Procedure**

**Late GA Pain Scores During Procedure**

- **VAS (mean ± SD)**
- **Time Point**: Baseline, Speculum, PCB, Dilation, Aspiration, Post Op
- **Lines**: HC/APAP (solid line), Placebo (dashed line)
Cervical priming – increases pain

- Increase in preoperative cramping
- Increases or no impact on intra-procedure pain
- Possibly faster procedure but longer process
- Easier for provider
  - Need to balance needs for safety/medical indications
Paracervical block

**Mean VAS Scale**

- **Sham-PCB**
- **PCB**

*P(Sham-PCB vs. PCB) < 0.0001*

**Baseline**

**Speculum**

**PCB**

**Dilation**

**Aspiration**

**Post OP**

Renner Obstet Gynecol 2012
Effective Paracervical Block

- 20mL, 1% buffered lidocaine
  - Better than 10mL
- 4 sites
  - Better than 2 sites
- Slow
- Deep (3cm)
- To wait or not?

Renner Cochrane Database of Systematic Reviews, Issue 2, 2009
10mL 1% PCB+ 5mL Intrauterine Lidocaine (4%)
Local Anesthesia Toxicity

• **Side effects:**
  – Lightheadedness, tinnitus, circumoral tingling, and metallic taste in the mouth

• **Adverse events:** EXTREMELY RARE
  – Seizures, cardiac effects and allergic reactions
  – Most morbidity and mortality related to doses exceeding 300mg

• **Maximum lidocaine dose**
  – 4.5mg/kg → 200mg

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Insufficient or conflicting data

Renner 2009 Cochrane; Karasahin 2013 Contra; Aksoy 2016 Obstet Gyneol
Stay tuned
Quality measures

• Satisfaction
pan·a·ce·a

/ˌpænəˈsēə/

noun
a solution or remedy for all difficulties or diseases.
"the panacea for all corporate ills"

synonyms: universal cure, cure-all, cure for all ills, universal remedy, elixir, wonder drug; informal magic bullet
Where does that leave us?

• Pain is multimodal
• Pain management needs to be multimodal
  – NSAIDs
  – Paracervical block
  – Nonpharmacologic
    • Supportive environment
    • Choice
Questions?