Pain Management in Pregnancy

Health Homes for Pregnant Women with Substance Use Disorder
PA Coalition of Medical Assistance MCOs

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Problem: Pain in Pregnancy

• Common:
  • 60-90% low-back pain (LBP); 20% pelvic pain; swelling around nerves; headache; migraine; rheumatoid arthritis; irritable bowel syndrome

• Pain ↑ with advancing pregnancy, interferes with work, activities, and sleep

• Pregnancy-related LBP is the most important risk factor for postpartum LBP

Liddle SD. Cochrane Database Syst Rev. 2015;30:CD001139
Problem: Pain in Pregnancy

- Opioid prescribing in pregnancy is common
- 534,500 pregnant women enrolled in a commercial insurance plan from 6 months before pregnancy through delivery
- 14% filled an opioid prescription at least once during prenatal period
- 6% of women received opioids throughout all trimesters

Prevalence of Opioid Dispensing During Pregnancy (overall) by State.

Liddle SD. Cochrane Database Syst Rev. 2015;30:CD001139
Treatment Options: “Multimodal”

Complex pain has biological, psychological and social components

Current focus: Alternative Strategies

• Chiropractic manipulation
• Physical Therapy
• Acupuncture
• Others: manual therapy, water therapy, transcutaneous nerve stimulation, stabilization belts, yoga, and other complementary and alternative medical treatments
1. **Forward tilting of the neck:**
   - Neck pain
   - Numbness and tingling in hands and fingers
   - Pain b/w shoulder blades
   - Carpal Tunnel

2. **Forward tilting of the pelvis:**
   - Sciatica
   - Low back pain
   - Leg pain
   - Pubic pain

3. **Hyperextension of the knees & flattening of the feet:**
   - Heal pain
   - Foot pain

4. **Backwards extension of the head:**
   - Neck pain and stiffness
   - Headaches

5. **Hyperextension of the Upper Back:**
   - Rib Pain
   - Difficulty Breathing

6. **Accentuated low back curvature:**
   - Low back pain and strain
Exercise

- Best: encourage **preventive measures** among pregnant women and those who are planning to become pregnant.
  - Women who participate in prophylactic education and strengthening programs during early pregnancy can avoid problems from low back pain
  - Women who are in good physical shape before pregnancy experience less back pain during pregnancy

Physical Therapy

- Education, activity adjustments
- "Teach" posture/ergonomics
  - how to stand, walk, or bend without causing stress on spine
  - back strengthening, stretching, and self-mobilization techniques
  - stability by strengthening the muscles around the lumbar spine
- Most patients respond well to activity and postural modifications

Chiropractic Manipulation

- Safe in pregnancy
- Manipulation or adjustment of the pelvis has provided relief and restored function for 91% of patients studied
- “Webster Technique”
Accupuncture

• Believed to work by stimulating the body's own pain relieving opioid mechanisms

• Some data on acupuncture for LBP in pregnancy show superiority of acupuncture for relieving pain and decreasing disability

• But a 2018 meta-analysis suggests that there have only been few high-quality studies that overall suggest limited benefit

Int J Gynaecol Obstet. 2018 May;141(2):151-158
Acupuncture

“Forbidden Points” during pregnancy – but currently no data to support harm

Medications - Pregnancy

- Few medications are absolutely contraindicated during pregnancy/lactation
- But studies in pregnant women are lacking for most pain medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Use in Pregnancy</th>
<th>Fetal/Neonatal Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen (Tylenol)</td>
<td>Safe</td>
<td>Safe</td>
</tr>
<tr>
<td>NSAIDs (e.g. Ibuprofen)</td>
<td>Caution</td>
<td>Ductus closure</td>
</tr>
<tr>
<td>Tramadol</td>
<td>Safe, abuse potential</td>
<td>Neonatal withdrawal (chronic)</td>
</tr>
<tr>
<td>Opioids</td>
<td>Safe, abuse potential</td>
<td>Low fetal heart rate, NAS</td>
</tr>
</tbody>
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Tincture of Time

• Pain usually subsides soon after delivery of the baby
• Over the six-week period following delivery, the pelvic ligaments regain their rigidity and are better able to support normal weight bearing and motion during normal daily activities

• Pain persisting past six weeks is not normal
• Need to leverage Prevention/Pre-emptive pain management strategies in trajectory toward chronic pain
Summary

• Pain is common during pregnancy
• Low back pain in pregnancy is a risk factor for chronic low back pain
• A multimodal approach that supports behavioral interventions and complementary/alternative strategies, with or without the judicious use of medications, can be effective in mitigating the burden of pain during pregnancy
Questions