Pain during medical abortion in early pregnancy - Teenaged compared to adult women

MD Venla Kemppainen
University of Helsinki and Helsinki University Hospital, Finland

No conflicts of interest to declare
Background

- The method of abortion is rapidly changing from surgical to medical in several countries.
  - In Finland 95% of abortions are medical

- Almost every woman experiences pain during medical abortion

- Predictors of severe pain:
  - Young age
  - Low parity
  - Dysmenorrhea
Outline of the present study

- Patients were recruited in Helsinki between April 2016 and August 2018

- 140 patients were recruited, 123 came to follow-up visit and 109 returned all the questionnaires
  - 47 women: 15-19 years old
  - 62 women: 25-35 years old

- Women's first pregnancy
- Duration of the pregnancy up to 63 days of gestation
Pain management

- Pain medication:
  - Ibuprofein 600mg
  - Paracetamol 1g

- First dose simultaneously with misoprostol and then both 3 times a day if needed

- Pain is measured by visual analogue scale VAS
Study protocol

Day 1: Out patient clinic
- Recruitment
- Background questionnaire
- Examination and ultrasound
- Mifepristone 200mg

Day 3: At home/policlinics
- Misoprostol 0.8 mg
- Pain diary (VAS every time pain medication is needed)

2-4 weeks later Follow-up visit
- Pain memory
- Patient satisfaction
- Adequacy of pain medication
<table>
<thead>
<tr>
<th>Demographics</th>
<th>Teenagers N=47 Median (IQR)</th>
<th>Adults N=62 Median (IQR)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>18 (2,0)</td>
<td>28 (5,0)</td>
<td>&lt;0,001</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>21,5(4,5)</td>
<td>22,0 (2,7)</td>
<td>0,267</td>
</tr>
<tr>
<td>Duration of gestation</td>
<td>50,0 (12,0)</td>
<td>48,6 (9,0)</td>
<td>0,129</td>
</tr>
<tr>
<td>Nausea during pregnancy (VAS, 0-100 mm)</td>
<td>40 (53)</td>
<td>26 (57)</td>
<td>0,087</td>
</tr>
<tr>
<td>Reported menstrual pain (VAS)</td>
<td>44 (44)</td>
<td>31 (55)</td>
<td>0,257</td>
</tr>
</tbody>
</table>
Highest pain during abortion

P-value 0.066
Likelihood of severe pain

VAS <70

VAS >70

p=0.076
Distribution of maximal pain

- VAS ≤30
- VAS 31-69
- VAS >70

% Teenagers: [Column 1]
% Adults: [Column 1]
Memory of pain

p=0.051
Patient satisfaction (VAS)

p=0.743
Was the pain medication adequate?
- Yes: teenagers: 82.7% vs adults: 65.7%
- p = 0.084

Furthermore adequacy of pain medication by groups
- VAS <70 91.7%
- VAS ≥70 56.9%

Would you choose the medical method again in case on subsequent abortion?
- Yes: 88.5% vs 93.1%
- p = 0.091
Conclusion

- Half of the patients experience severe pain during medical abortion despite of recommended pain medication.
- Patients are satisfied with the pain medication given even though pain is often severe
  - Should pain medication be more efficient?
- Most of patients would choose medical method again if needed
Thank you

- Oskari Heikinheimo, MD, professor
- Maarit Mentula, MD, docent
- Jouni Ahonen, MD, docent
- Vilja Palkama, MD
- Pirjo Ikonen
Highest pain during abortion

- 15-17 years old
- 18-19 years old
- 25-35 years old