Misoprostol for Treatment of Failed Pregnancy

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What is pregnancy failure?

A range of conditions in which pregnancy does not develop to viability, also “pregnancy loss”

- **Spontaneous abortion**
  - complete (all products of conception expelled)
  - incomplete (some products remaining)

- **Anembryonic gestation** (no embryo has developed)

- **Missed abortion** (fetal death, diagnosis relies on ultrasound)

- **Unwanted pregnancy** leads to **termination**
Why does it happen?

- Spontaneous abortion occurs in 15-20% of all pregnancies

- Incomplete abortion often results from attempts at induced abortion, particularly in the absence of safe services

- Policy developed as a result of this situation is termed Post-Abortion Care (PAC)
Treating Failed Pregnancy

- **Expectant Management**
- **Surgical Methods**
  - Manual Vacuum Aspiration (MVA)
  - Electric Aspiration
  - Dilatation and Curettage (D&C)
- **Medical Method**
  - Misoprostol
What is Post-Abortion Care?

- A way to attend to the needs of women seeking medical services after pregnancy loss
- Not a field of medicine
- Not a specific service
Who Comes for Post-Abortion Care?

- Women with wanted pregnancies and spontaneous loss
- Women with problems after induced abortion in a medical service
- Women with problems after clandestine or self-induced abortion

*MISOPROSTOL CAN ADDRESS THE NEEDS OF ALL THESE WOMEN*
Medical Management of Failed Pregnancy

- A way of emptying the uterus with medicines (pills)
- A “no touch” procedure
- A scientific adaptation of potions, teas, herbal remedies that women have sought for eons
- A new option for services and for women
Advantages of Misoprostol

- Misoprostol is less invasive than surgery and quicker than expectant management
- Research shows misoprostol effectively evacuates the uterus after pregnancy failure
- Can be provided at lower levels of the health care system
- Mid-level providers can use the method
Who will benefit?

- Women preferring a non-invasive procedure will benefit by having a no-touch alternative
- Women seeking privacy & out-patient care
- Skilled providers, by reduced workload for unnecessary surgical procedures
- Health care system: the burden of surgical care will be reduced
# Results of Selected Randomized Studies: Miso for PAC

<table>
<thead>
<tr>
<th>Author</th>
<th>Arms</th>
<th>N</th>
<th>Efficacy</th>
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<tbody>
<tr>
<td>Zhang</td>
<td>800 mcg vaginal miso (max 2 doses) vs. surgical evacuation</td>
<td>30</td>
<td>93.0%</td>
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<td></td>
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<td>148</td>
<td>97.0%</td>
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<tr>
<td>Dao</td>
<td>600 mcg oral miso vs. MVA</td>
<td>218</td>
<td>94.5%</td>
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<td>224</td>
<td>99.1%</td>
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<tr>
<td>Shwekerela</td>
<td>600 mcg oral miso vs. MVA</td>
<td>150</td>
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<td>150</td>
<td>100%</td>
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<tr>
<td>Weeks</td>
<td>600 mcg oral miso vs. MVA</td>
<td>107</td>
<td>91.5%</td>
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<td></td>
<td></td>
<td>82</td>
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<tr>
<td>Pang</td>
<td>800 mcg oral miso (repeated in 4 hrs) vs. 800 mcg vaginal miso (repeated in 4 hrs) (first 24 hrs)</td>
<td>103</td>
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<tr>
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<td></td>
<td>95</td>
<td>61.1%</td>
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<tr>
<td>Ngoc</td>
<td>600 mcg oral miso vs. 1200 mcg oral miso</td>
<td>149</td>
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<td>146</td>
<td>93.8%</td>
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<tr>
<td>Diop*</td>
<td>400 mcg sublingual miso vs. 600 mcg oral miso</td>
<td>146</td>
<td>94.5%</td>
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<td></td>
<td></td>
<td>148</td>
<td>94.6%</td>
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</tbody>
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*in press
Instructions for Use: Miso for postabortion care

**Purpose:**
- Guidance for clinicians/medical personnel
- Dissemination via fact sheets, clinical training, websites, inclusion in scientific articles, etc.

**Content:**
- Shadows a standard product label for use of misoprostol for incomplete uterine evacuation and miscarriage
Instructions for Use: Indication and usage

Misoprostol is indicated for treatment of incomplete uterine evacuation for women with uterine size less than or equal to 12 weeks LMP at presentation

- For incomplete abortion (retention of debris):
  - 600 mcg orally or 400 mcg sublingually
  - success rate 66-100% using this regimen

- For missed abortion (sac with no embryo):
  - 800 mcg vaginally
  - success rate 60-93% using the recommended dose
Where is miso being used for this indication?

- Madagascar: 400 mcg sublingual miso regimen incorporated into the Reproductive Health Norms and Protocols of the MOH
- Ecuador: miso for PAC addendum to national norms under consideration
- Mexico City: miso soon to be implemented as first-line treatment for incomplete abortion
Moving Forward: Misoprostol for PAC

- EDL application approved by WHO
- Chapter in IJGO Supplement recommending evidence-based regimens of miso for PAC (December 2007)
- Misoprostol added as technology to PAC Consortium Technology Task Force
- Instructions for Use available in 8 languages
When unwanted pregnancy results in the need for termination

- Mifepristone + misoprostol
- Methotrexate + misoprostol
- Misoprostol alone

Mifepristone + misoprostol is the “gold standard”
International Consensus for Accessibility to All

- **1998 Bellagio Meeting Consensus:**
  Mifepristone followed by a suitable prostaglandin can feasibly be delivered in a manner that is safe, effective, and acceptable for women in developing countries.\(^1\)

- **2000 Expert Meeting:**
  Development of recommendations for use in low-resource settings (Orange book…)

- **2005: WHO Essential Drugs List**

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Misoprostol with mifepristone

• Most effective when used up to 63 days’ LMP

• Recently sublingual and buccal administration have become popular

• Many regimens work well
Why misoprostol is sometimes used alone...

• Mifepristone is expensive; not registered in many countries

• Misoprostol is cheap, available in many countries, easy to transport, store, and administer

• Efficacy of misoprostol alone up to 63 days’ LMP is approx 85%
Challenges

- Pharmaceutical companies’ reluctance:
  - To reinvest in labeling for these indications
  - To make drug available at locally sustainable prices
  - To introduce misoprostol in places where need is greatest although financial rewards may be few
- Policymakers fear women’s self-use of drug
- Adoption of most appropriate service delivery models depends on purposes & clinical protocols, based on infrastructure, service demands, & legal/policy constraints in each country
Misoprostol for treatment of pregnancy failure has the potential to…

- improve women’s health
- secure reproductive choice
- offer women autonomy
- help the disadvantaged especially
- enhance women’s lives
THANK YOU.....