Early Pregnancy Loss: Medication Management

Robin Wallace, MD, MAS
Clinical Assistant Professor
Department of Family & Community Medicine
University of Texas Southwestern

EPL Management:
Options for the clinically stable patient

Expectant	**Medication**	Office-based aspiration	Operating room aspiration

- PreFaiR trial
  - RCT established the most effective medication management
  - Mifepristone pre-treatment followed by misoprostol

Medication Management

- Misoprostol
  - Prostaglandin analogue
  - Stimulates uterine contractions & softens cervix
  - Inexpensive, easy storage
- Mifepristone
  - Progesterone and glucocorticoid receptor antagonist
  - Primes myometrium and cervix for prostaglandin
  - Requires REMS certification with the FDA
  - Low NNT for EPL: 6 doses to achieve 1 more success

PreFaiR Trial (Schreiber et al 2018)

- RCT, N=300
- EPL diagnosed at 5-12 weeks GA
- Mifepristone pre-treatment + Miso vs. Misoprostol alone
- Primary outcome = complete EPL at first follow-up (day 1 after miso)

PreFaiR Trial Results (Schreiber 2018)

	Mife-Pretreatment (N=148)	Misoprostol-Alone (N=149)	Relative Risk (95% CI)
Complete* by the 1st follow-up = treatment success	124 (83.8)	100 (67.1)	1.25 (1.09–1.43) *P<0.001*
Complete* by the 2nd follow-up (day 8)	132 (89.2)	111 (74.5)	1.20 (1.07–1.33)
Complete* by 30-day telephone call	135 (91.2)	113 (75.8)	1.20 (1.08 –1.33)
Uterine Aspiration	13 (8.8)	35 (23.5)	0.37 (0.21–0.68)

Medication Management for EPL

Incomplete miscarriage	Miso 400 mcg SL - or - 600 mcg PO
All other types of EPL (Anembryonic gestation, embryonic or fetal demise)	1. Mifepristone 200 mg PO 2. Misoprostol 800 mcg vaginally (PV) 24 hrs later
No Initial Response	Misoprostol 800 mcg PV only, with repeat dose 24-48 hrs later if no initial response

Medication Management: Practice Integration

- Dispense misoprostol directly or prescribe?
  - Indicate EPL diagnosis on Rx
- Register as a REMS provider to dispense mifepristone?
  - Complete application with FDA
  - Complete both Prescriber and Patient Agreements

Medication Management: Practice Integration

- 24 hour call service?
- Back-up plan for uterine aspiration?
  - Emergent vs. non-urgent

Mifepristone pretreatment is cost-effective

- Addition of mifepristone pretreatment reduces need for follow-up or additional interventions
- “Good value” for patients
- Cost effective up to $293/pill

Medication Management for EPL

- Integration of medication management increases access and options for this preference-sensitive decision
- Addition of mifepristone to misoprostol increases efficacy and is cost-effective