

Very early abortion
with uterine aspiration --
pros/cons and patient access
implications

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**do you perform uterine
aspiration abortion in
very early pregnancy <6
weeks?**

Is early aspiration abortion worth it?

Undesired pregnancy

35 days estimated gestation

No symptoms

Prefers clinic procedure

PROS

Faster

Easier

Lower risk

Lower cost

Potential same
day

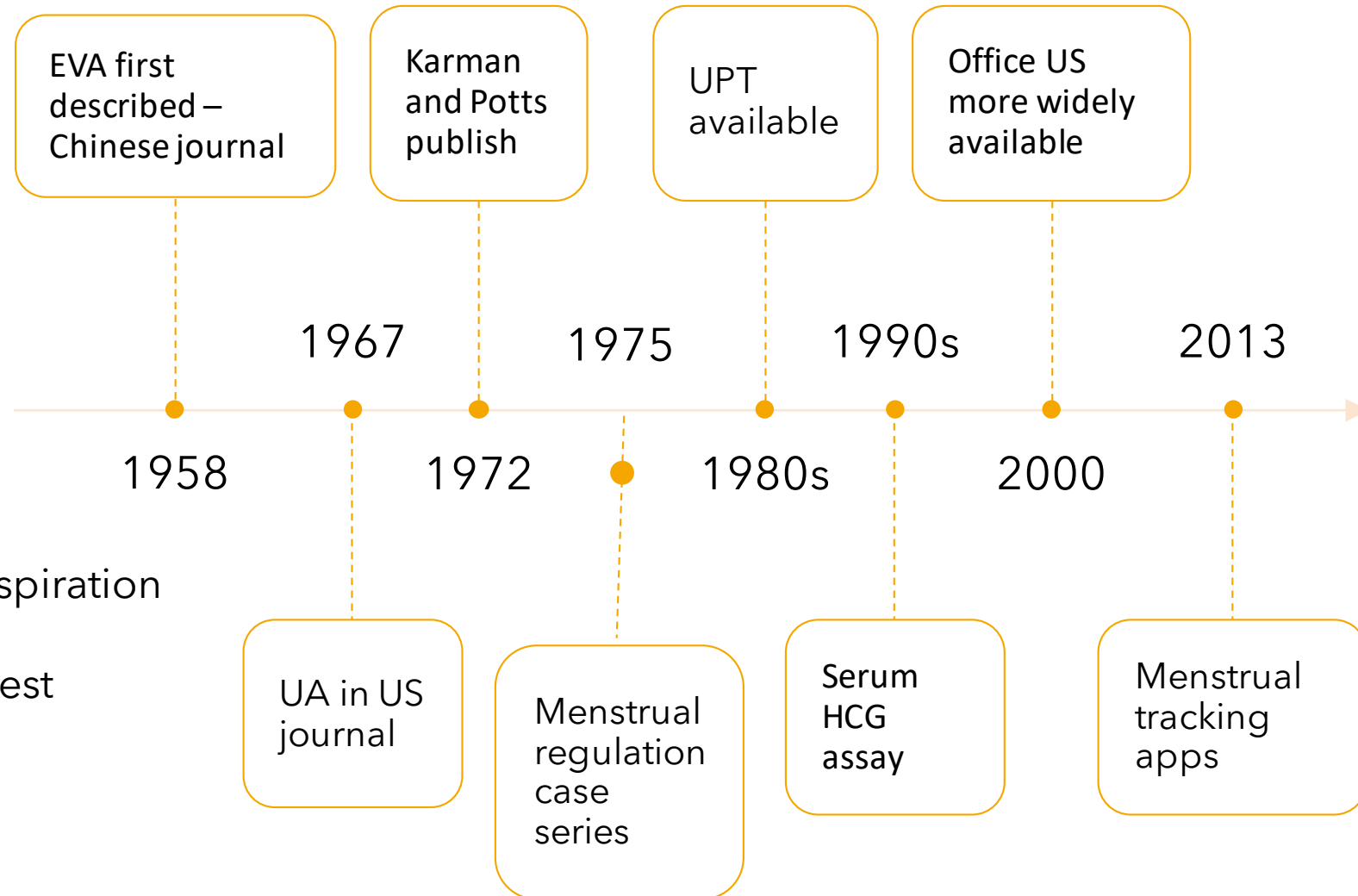
CONS

As effective?

More follow-up needed

More uncertainty about IUP

Timeline - very early aspiration abortion



EVA = electric vacuum aspiration
UA = uterine aspiration
UPT = urine pregnancy test
US = ultrasound

SFP guideline 2013.

Menstrual regulation 1970s

- Bangladesh + 12 other countries - International Fertility Research Program
- With or without pregnancy test
- Up to 14 days missed period (42 days post LMP) -- some to 50 days
- 4-6 mm cannula
- Ongoing pregnancy in 1.2% (of confirmed pregnant)
- Incomplete evacuation 1.2%
- 5% overall complications

Advancements or barriers to care?

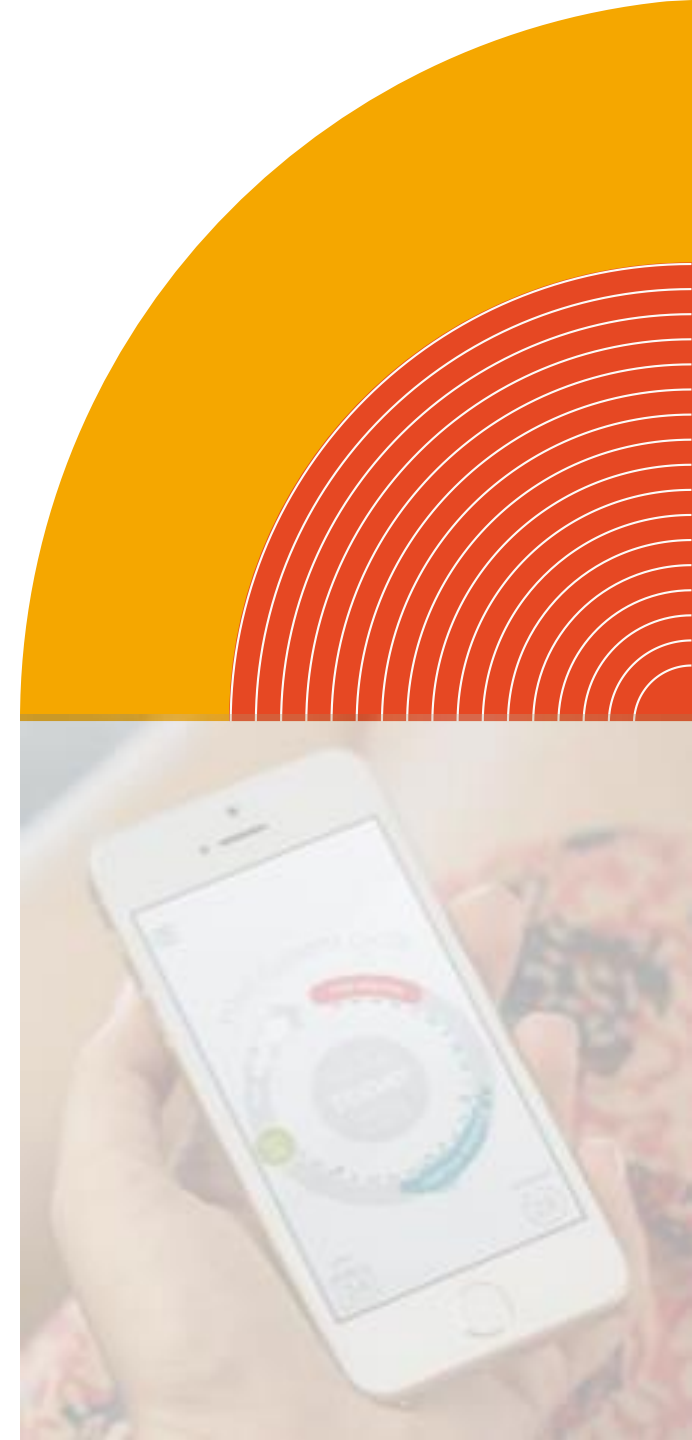


Dating assessment

90% sensitivity:

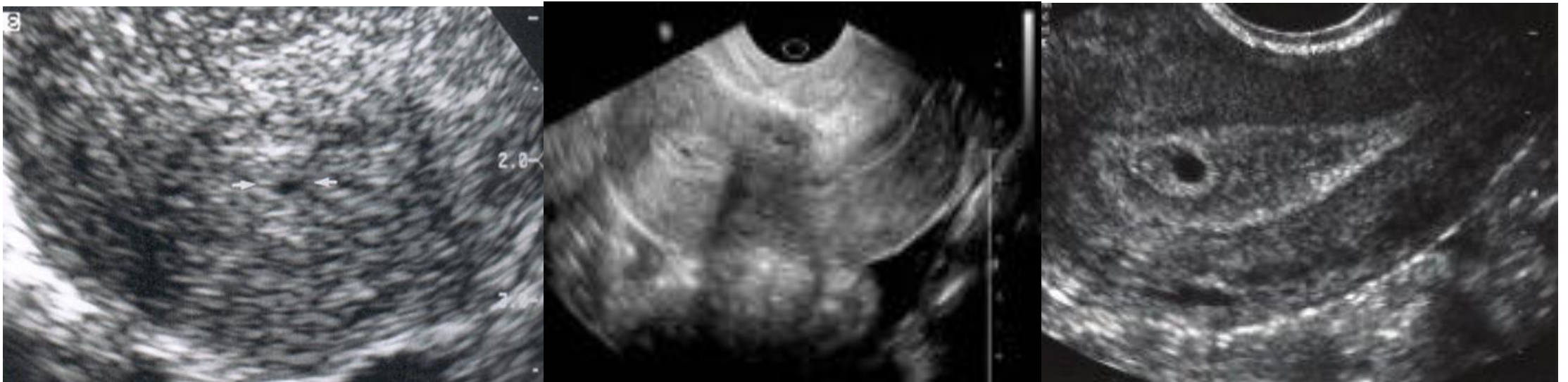
Asking LMP, date of conception, if >10 weeks,
if 2+ missed periods

We use this for MA, why not UA?



Epidemic of PUL diagnoses

1. Not taking into account expected size for dates
2. Labeled PUL even when GS without YS



PUL = pregnancy of unknown location; no uterine findings
GS = gestational sac
YS = yolk sac

very early abortion outcomes



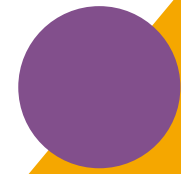
safety



effectiveness

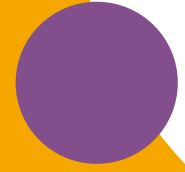


access





**Goal: Avoid missing
ectopic pregnancy**



EP in PUL undergoing abortion - clear risk factors - 7% in UA

N=3987 <7 wk

High risk EP referred out

PUL = 57 (14.3%)

EP = 7/57 (12.3%)

Only 4 confirmed (7%)

- All underwent UA
- All were >35d by LMP
- All had baseline hCG >DZ

N=19,151

High risk EP referred out

PUL = 501 (2.6%)

EP = 21/353 (5.9%)

Offered expectant
management if bleeding

- UA: 8/109 (7.3%)
- MA: 13/244 (5.3%)

Baldwin, Bednarek, Russo, Contraception 2020.

Borchert, Boraas, Contraception 2023.

Comparative outcomes for IUP <43d v 43-48d

Table 2

Follow-up and adverse outcomes by 90 days following medication or aspiration abortion compared between visualized intrauterine pregnancy <43 days versus 43–48 days.

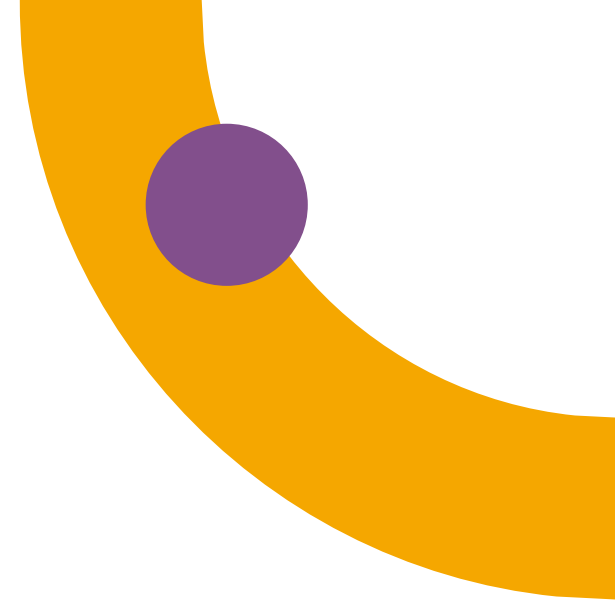
	Aspiration abortion n = 1016			Medication abortion n = 2914		
	<43 days (n = 469)	43–48 days (n = 547)	p-value	<43 days (n = 1470)	43–48 days (n = 1444)	p-value
Routine follow-up ^a	398 (84.9)	467 (85.4)	0.82	1040 (70.8)	970 (67.2)	0.04
Any follow up visit	205 (43.8)	155 (28.3)	<0.01	1229 (83.8)	1198 (83.1)	0.58
Problem visit	49 (10.5)	58 (10.7)	0.95	54 (3.4)	72 (5.0)	0.08
Phone calls for problems	34 (7.3)	31 (5.7)	0.30	64 (4.4)	71 (4.9)	0.47
Complete abortion documented	447 (95.3)	543 (99.3)	<0.01	1242 (84.7)	1197 (83.0)	0.46
Adverse outcomes^b						
ED visits recorded	3 (0.6)	2 (0.4)	0.53	16 (1.1)	20 (1.4)	0.47
Ectopic pregnancy	0	0	–	1 (0.1)	0	–
Ongoing pregnancy	2 (0.4)	1 (0.2)	0.48	14 (1.0)	9 (0.6)	0.32
Retained gestational sac without ongoing pregnancy	–	–		27 (1.8)	32 (2.2)	0.47
Symptomatic retained tissue	5 (1.1)	7 (1.3)	0.75	12 (0.8)	36 (2.5)	<0.01
Interventions						
Repeat misoprostol administered	–	–		16 (1.1)	25 (1.7)	0.14
Aspiration/re-aspiration performed	3 (0.6)	6 (1.1)	0.44	34 (2.3)	40 (2.8)	0.43
Complications						
Infection ^c	3 (0.6)	8 (1.5)	0.21	9 (0.6)	8 (0.6)	0.84
Hemorrhage	0	1 (0.2)	–	0	2 (0.1)	0.15
Uterine perforation	0	1 (0.2)	–	–	–	
Composite adverse outcomes ^d	12 (2.6)	16 (2.9)	0.72	75 (5.1)	94 (6.5)	0.10

UA = 2.7%

MA = 5.8%



Goal: Avoid a continuing pregnancy

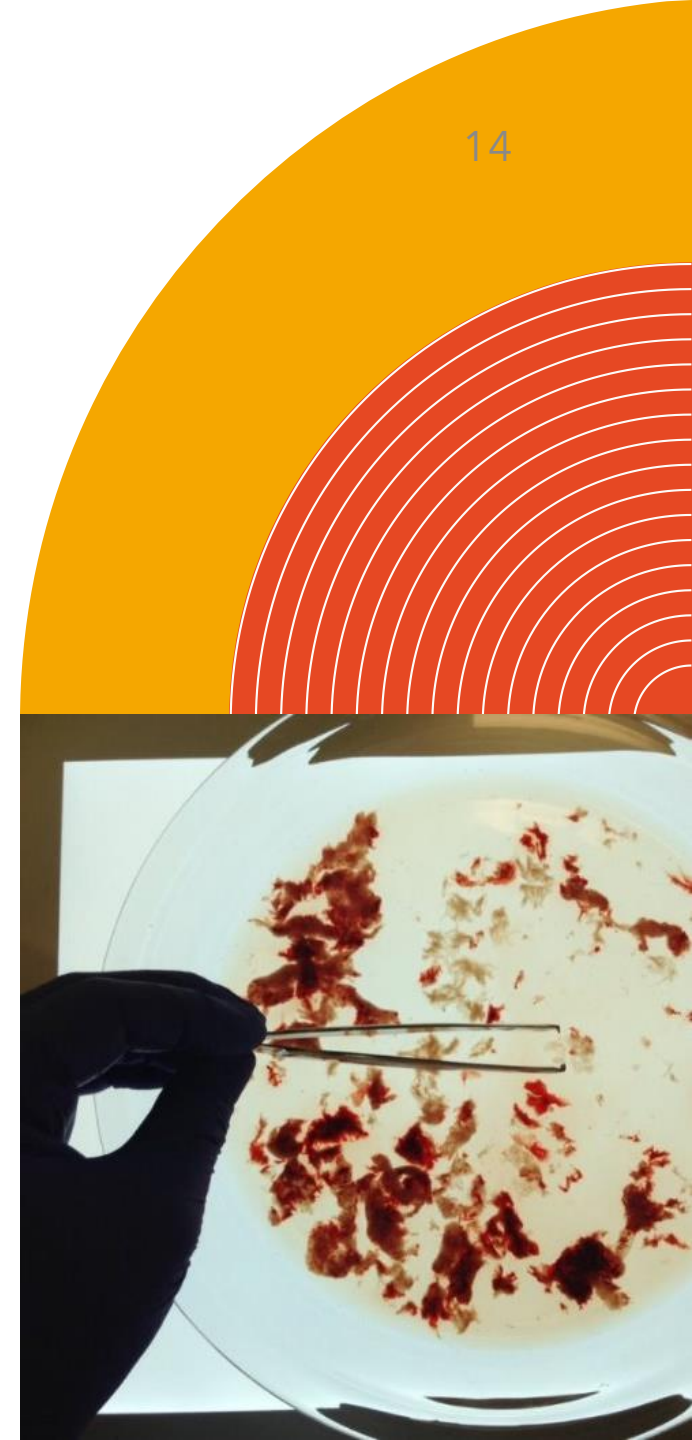


Evaluation of completed aspiration abortion

How we define completed

- Inspection of aspirate
- Immediate ultrasound
- Serial hCG

Not doing patient assessment



Inspection of aspirate at <42d high sensitivity + false positives

Table 3. Comparison of Proportion of True-Positive, True-Negative, False-Negative, and False-Positive Tissue Inspections by Medical Assistants* Among Women Randomized to Manual or Electric Vacuum Aspiration Before Surgical Abortion at Less Than 6 Weeks of Gestation

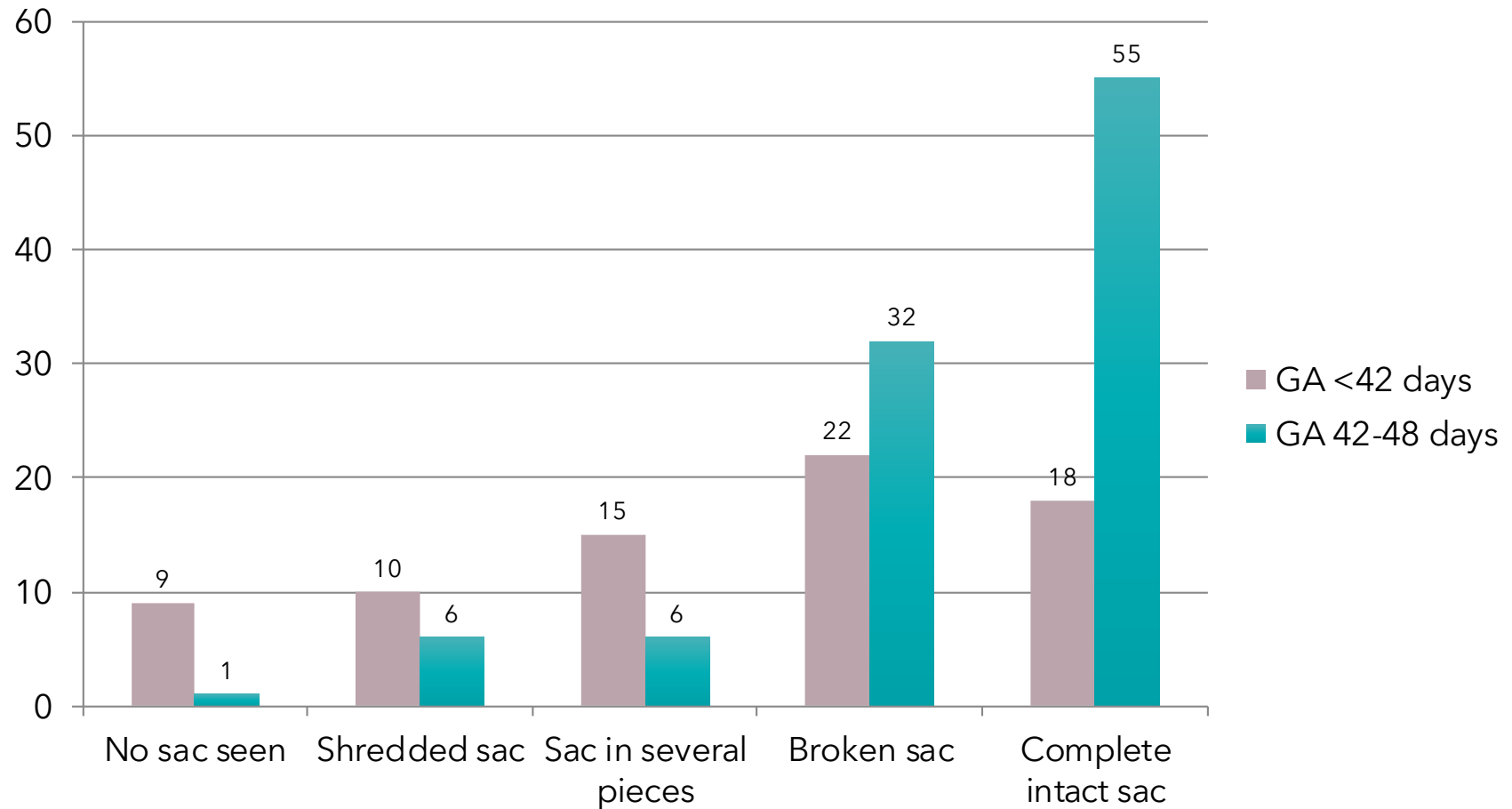
Characteristic	Manual (n=213)	Electric (n=203)	Relative Risk (95% CI)	<i>p</i> [†]
True-positive [‡]	176 (82.6)	161 (79.3)	0.90 (0.69–1.16)	.38
True-negative [§]	2 (0.9)	2 (1.0)	1.02 (0.38–2.47)	1.0
False-negative	33 (15.5)	40 (19.7)	1.16 (0.89–1.52)	.30
False-positive [¶]	2 (3.6)	0	0.51 (0.46–.56)	.50

82% and 76% sensitivity to confirm completed abortion

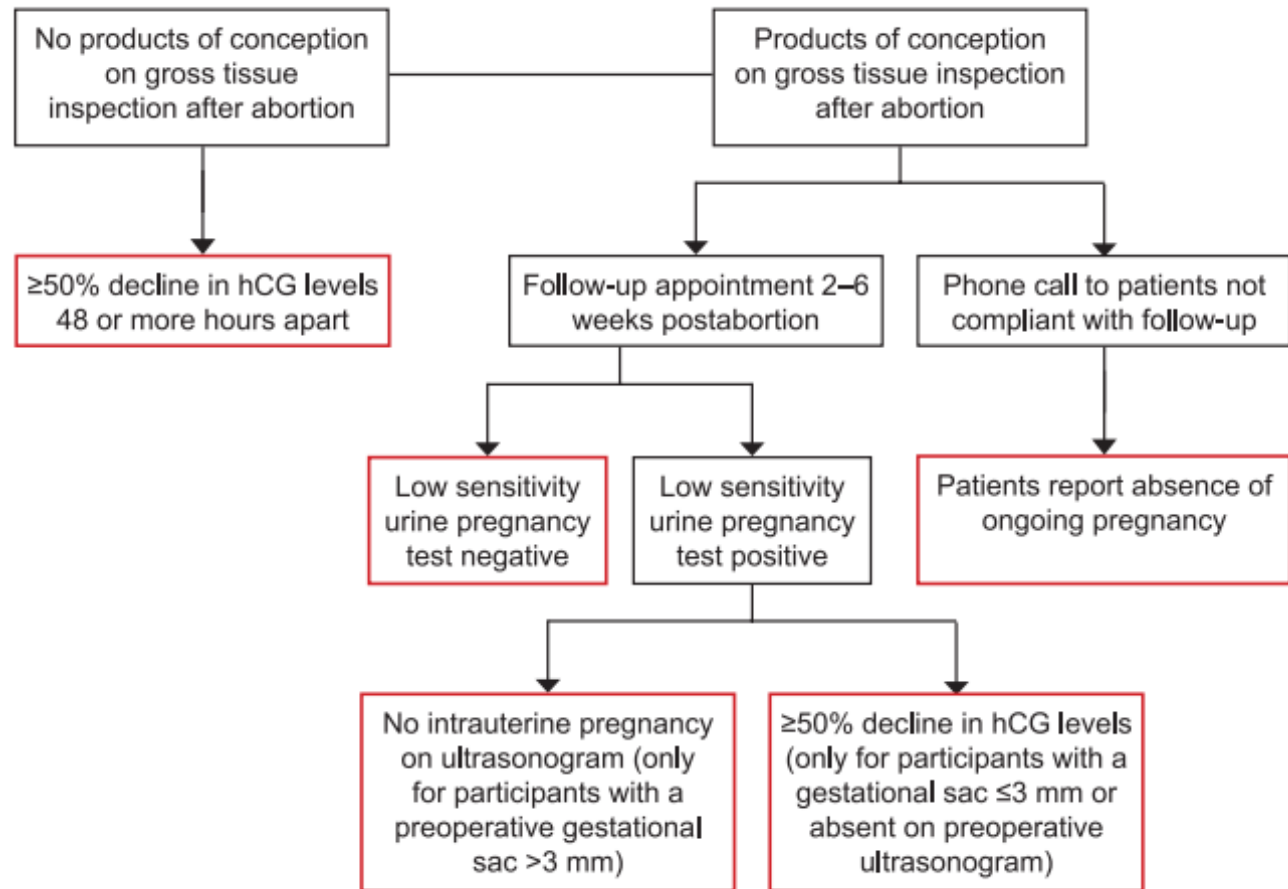
1.4% false positive - including in one ectopic pregnancy

GS visualized in aspirate in 96% of IUPs <42 days¹⁶

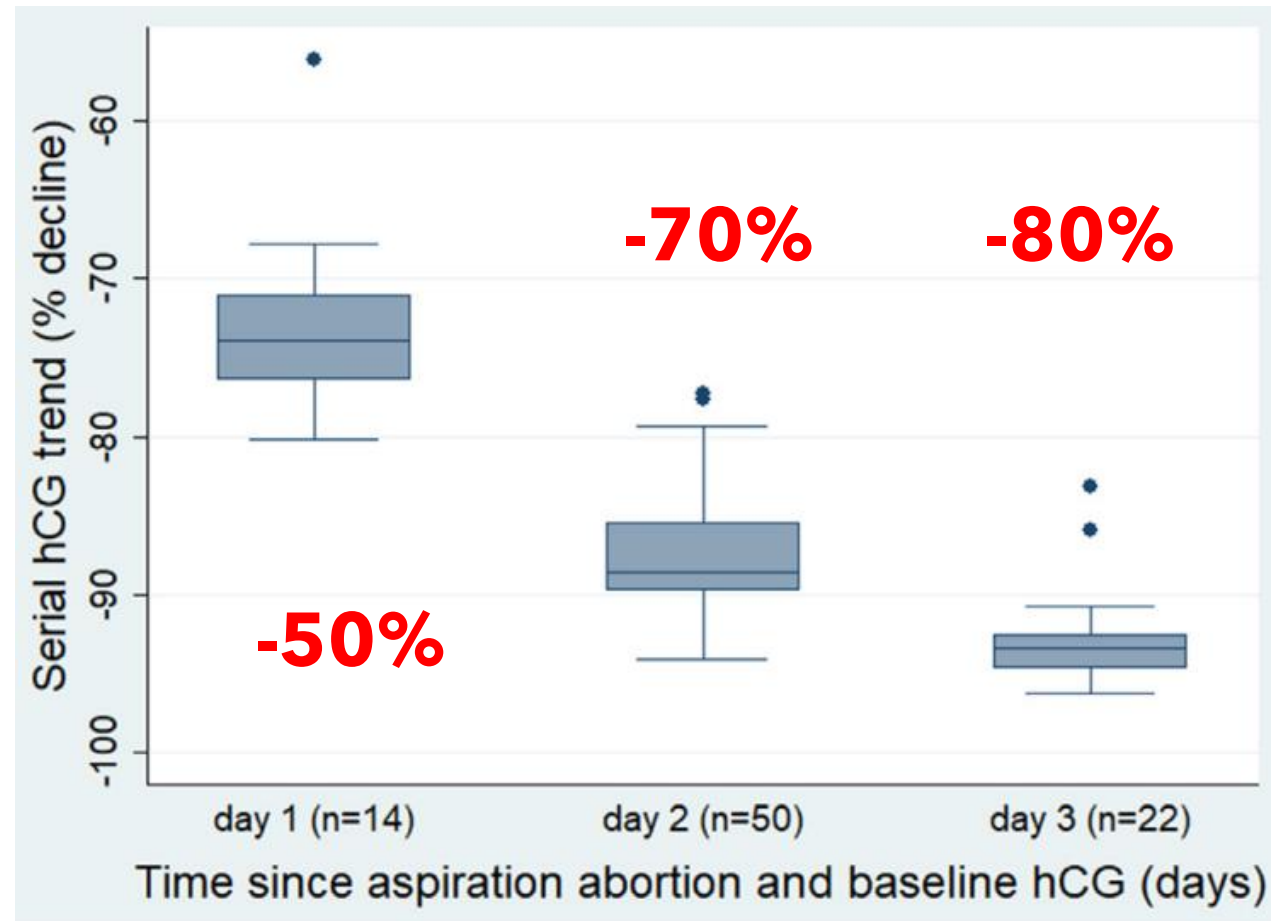
Abortions with IUP on US <42d (n=208) versus 42-48d (n=286)



Risk-based follow-up



hCG trend after completed aspiration abortions in ultrasound confirmed IUP <42 days



Summary - very early uterine aspiration



safety

faster diagnosis of EP

fewer complications



effectiveness

needs follow-up when:

<35 days

GS <4 mm

Very early uterine aspiration is safe and effective

- Access might be improved by not requiring ultrasound
- Must be balanced by the need for increased follow-up surveillance at <35 days and in PUL