Timing of expulsion observed, pain and bleeding after mifepristone and misoprostol – induced abortion

Mifepriston ve misoprostol ile indüklenen abortusta ağrının ve kanamanın başlama zamanı ve abortusun oluşma süresi arasındaki ilişki

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ÖZET

Bu çalışmanın amacı oral, düşük doz 200 mg Mifepristone ve oral 400 mcg Misoprostol ile tedavi edilen hastalarda ağrının tam olarak başlama zamanı, düşüğün meydana geldiği zamanı ve kanama miktarı hakkında bilgileri güncellemektir.

Ekibimiz, 56.güne kadar olan gebeliklerde oral mifespriston'dan 48 saat sonra misoprostol alan hastalarda kramplar, düşük zamanı ve kanamanın başlangıç zamanını analiz etti.

Hastaların semptom günlüklerinden bilgileri aldık ve semptom başlangıcını 3 kategoriye ayırdık: misoprostol kullanımından önce, misoprostol kullanımından 24 saat sonra, ve misoprostol kullanımından 48 saat sonra.

200 hastadan 175'inde (%87,5) kramplar, gözlenen düşük ve kanama başlangıç zamanı ile ilgili bilgiler alınabildi, ancak 175 hastadan 30'u (%17,1) embriyoyu tanıyamadıklarından çalışma dışı bırakıldılar.

Bütün gruplarda, 6 hasta (%4,13) gebelik materyalini gördü, sırasıyla 37 (%25,5) ve 49 (%33,7) hastanın misoprostol öncesi kanama ve kramp tarzında ağrısı oldu.

Tedavi grupları arasında erken kramplar ve kanaması olan hastaların oranı anlamlı olarak yüksek bulundu ve bu durum mifepriston ile misoprostol arasındaki interval ile bağlantılı idi.

Kramplar ve kanama misoprostol kullanımından 48 saat sonra belirgin olarak sırayla 8 (%5,5) ve 10 (%6,89) hastada azaldı.

Düşük materyalinin görülmesi, kanama, kramplar, misoprostol kullanımından 24 saat sonra en yüksek oranda görüldü.

Anahtar kelimeler: mifepriston, misoprostol, abortus

ABSTRACT

The objectives of this study were to date exactly the time of onset of pain, expulsion, and bleeding in subjects treated with low – dose 200 mg Mifepristone orally and 400 mcg Misoprostol by mouth as well.

Our team did analysis the cramping, expulsion observed and bleeding onset patterns in subjects till to 56 days pregnant who used misoprostol at 48 hours after mifepristone orally.

We collected data from patient's symptom diaries, and we divided symptom onset into 3 categories: before misoprostole use, 24 hours following misoprostol, and 48 hours after misoprostol.

Of the 200 patients, cramping, expulsion observed, and bleeding onset data were available for 175 (87.5 %), but 30 of 175 subjects (17.1 %) were not able to identify their embryo, so we excluded from the study.

Across all groups, 6 patients (4.13 %) observed their product of pregnancy, 37 (25.5 %) and 49 (33.7 %) experienced respectively bleeding and cramping before misoprostol use.

There were a significantly higher percentage of subjects who experienced early cramping and bleeding between three treatment groups, and this was related to the interval between mifepristone and misoprostol.

This percentage was significantly reduced in subjects who experienced cramping and bleeding 48 hours after misoprostol use respectively 8 (5.5 %) and 10 (6.89 %).

The incidence of expulsion observed, bleeding, cramping was highest 24 hours after misoprostol use.

Key words: mifepristone, misoprostol, abortion

INTRODUCTION

It was essential to let you know that this study applied for the first time in our hospital and in our country as well. For the first time, women in our country seeking abortion have had the option of either a surgical or medical abortion. In addition, we familiarized with idea that many women prefer medical abortion as it allow them greater privacy and control over their abortion. Since 1992 women in Albania have had the legal right to an abortion. The laws related to abortion were further liberalized in 1995 with the passage of the "Law on Interruption of Pregnancy", which permits abortion up to 12 weeks from the presumed date of conception. After the legalization of abortion in 1992, abortion ratios increased dramatically between 1992 and 1997 with over 40 abortion for every 100 live births.(1) However, as family planning has become more available, abortion ratios have decreased in recent years. Recent estimates range from a ratio of 7.3 abortion to 17.2 abortions per 100 live births. (2) In Albania, abortion must be performed by a physician, in either a public or private health institution (2,3).

Mifepristone, a synthetic progesterone, is used to competitively block the effects of progesterone and weaken the attachment of an early pregnancy on the endometrium. Mifepristone serum levels do not increase proportionally with increasing oral doses(4,5). Misoprostol, a synthetic prostaglandin, is used 48 hours after mifepristone to induce cervical softening and dilatation, and uterine contractions to assist in the expulsion of the pregnancy (5). The efficacy of the reduced dose has been demonstrated in research by the World Health Organisation and in clinical studies in the USA (5,7).

MATERIALS AND METHODS

The study was performed from February 2006 – May 2008 in Obstetric – Gynaecology University Hospital of Tirana , Albania. Our hospital regularly provides abortion service using dilatation and curettage under local anesthesia and is among the largest abortion provider in Albania. Women made two clinic visits ore more. At the first visit, they received 200 mg mifepristone and were asked to select clinic or home administration of misoprostol.

All subjects more than 18 years old who desired pregnancy termination, enrolled in our clinic.

Inclusion and exclusion criteria for eligibility in medical abortion was demonstrated in Table 1.

Eligibility and method selection:

If all of the answers to Questions 1 to 16 appear in bold sections, the woman is eligible for medical abortion (6).

If the woman choose to participate in the study and has signed the consent form, administered mifepristone

At the initial visit (study day 1), a clinician confirmed gestational age by transabdominal ultrasound.

After the patient signed an informed consent, they swallowed a single pill of 200 mg mifepristone under direct observation, and study personnel recorded the time. Subjects were then randomly assigned to self – administered 400 mcg p/os misoprostol at about 48 hours after receiving mifepristone. All subjects were given the option of returning to the clinic for misoprostol swallowing.

Subjects received a symptom diary to record the date and time of misoprostol use as well as the onset of cramping, expulsion observed and bleeding. All subjects were required to return for a follow – up visit at the end of fortnight. At the follow – up visit, a clinician determined treatment success by pelvic exam or transabdominal ultrasound. The clinician also collected symptom diary at this time, and usually confirmed the times of medication use and the times of symptoms onset. For each subject, we calculated the intervals between mifepristone & misoprostol swallowing and the onset of symptoms.

We excluded subjects who did not return to their follow – up appointments (subjects lost to follow – up). We also excluded subjects for whom timing intervals could not be computed due to irresolvable data entry errors and all this subjects who were not able to identify the embryo. We divided timing of symptom (pain, expulsion observed, and bleeding) onset into three categories : before misoprostol swallowing, 24 hours and 48 hours after receiving of misoprostol.

Outcome measures included time between mifepristone and misoprostole use and the onset of symptoms; time of 24 hours from receiving of misoprostol to the onset of symptoms; time of 48 hours from receiving of misoprostol to the onset of symptoms.

Data are drawn from a prospective study of 200 women who presented for an abortion with amenorrhea of ≤ 56 days .

RESULTS

This analysis included 200 women who enrolled from February 2006 – May 2008.

In related to symptoms we followed at the same time 145 subjects for; bleeding, cramping and expulsion observed in three points of the time: before misoprostol use, 24 hours after misoprostol use, 48 hours after misoprostol use.

In related to the expulsion observed 6 (4.13 %) of the subjects noticed their embryo before misoprostol use; 24 (16.55 %) of the subjects noticed their conceptus 24 hours after receiving the misoprostol; 38 (26.2 %).

Timing of onset of cramping is scheduled as below:

49 subjects (33.7 %) experienced onset of pain before misoprostol use.

24 subjects (16.55 %) did experience onset of pain , 24 hours after misoprostol use.

8 subjects (5.5%) experienced onset of pain , 48 hours after receiving misoprostol.

1	At least 18 years old (age of patient)?	**Yes**	No
2	Positive urine pregnancy test?	**Yes**	No
3	Gestational age, LM month....day.....year.....	**Yes**	No
4	Willing to come for at least one follow-up visit?	**Yes**	No
5	Willing to provide an address and/or phone Nr. where she can be contacted?	**Yes**	No
6	Willing to fill out a short diary of side effects?	**Yes**	No
7	Have an IUD in place?	**Yes**	No
8	Clotting disorders or anticoagulant therapy?	Yes	**No**
9	Long - term glucocorticoide - steroid therapy?	Yes	**No**
10	Adrenal insufficiency?	Yes	**No**
11	Vaginal bleeding?	Yes	**No**
12	Suspicion of ectopic pregnancy?	Yes	**No**
13	Documented history of familial porphyries?	Yes	**No**
14	Known allergy to mifepristone?	Yes	**No**
15	Known allergy to misoprostole?	Yes	**No**
16	Signs of severe ill health?	Yes	**No**

Table 1

Timing of onset of bleeding:

37 (25.5%) subjects experienced onset of bleeding before misoprostol use.

49 (33.7%) subjects experienced the first bleeding 24 hours after receiving misoprostol.

10 (6.89 %) subjects experienced onset of bleeding 48 hours after misoprostol use.

There was not a small number of patients that ended their abortion using only mifepristone. This result was confirmed by our colleagues in China, Tunisia(8).

Across all groups 6 patients (4.13%) observed their concepts, 37 (25.5%) and 49 (33.7%) experienced respectively bleeding and cramping before misoprostol use.

There was a significantly higher percentage of subjects who experienced early cramping and bleeding between three treatment groups, and this was related to the interval between mifepristone and misoprostol.

This percentage was significantly reduced in subjects who experienced cramping and bleeding 48 hours after misoprostol use respectively 8 (5.5 %) and 10 (6.89 %).

The incidence of expulsion observed, bleeding and, cramping was highest 24 hours after misoprostol use.

DISCUSSION

This analysis provides information about the timing of cramps, bleeding and expulsion observed relative to misoprostol use during medical abortion. The study results showed a high rate of success and high level of satisfaction with this method.

This study had several limitations.

Subject's self – report of symptoms may have resulted in recording errors of digit – preference recording. Application of 200 mg mifepristone in medical abortion confirmed one more time that mifepristone serum levels do not increase proportionally with increasing of oral doses. Providers and patients may find such information useful if patients could not avoid following up.

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