PAIN DURING MEDICAL ABORTION

A neglected issue?

Mirella Parachini,[1] Christian Fiala,[2] Sharon Cameron,[3] Teresa Bombas,[4]
Kristina Gemzell-Danielsson,[5] Laurence Saya,[6]

[1] San Filippo Neri Hospital, Rome, Italy, [2] Gynmed Clinic, Vienna, Austria, [3] Chalmers Centre, NHS Lothian, Scotland, [4] Obstetric Service, Centro Hospitalar e Universitário de Coimbra. Portugal, [5] Department of Women's and Children's Health, Division of Obstetrics and Gynecology, Karolinska Institutet and Karolinska University Hospital, 171 76 Stockholm, Sweden, [6] Altius Pharma CS, Paris, France

INTRODUCTION

- Besides deliveries, abortions are one of the most frequently performed interventions in obstetrics-gynaecology.
- Since introduction of the medical method, research has largely focused on improving efficacy, defining the lowest dose for mifepristone and the optimal type, dose and route of administration of the PG.
- Nowadays, while the efficacy of a range of mifepristone- PG regimens for medical abortion has clearly been established, the time has come for the assessment of the tolerability of these regimens, in particular the pain associated with different regimens, since pain is an important and commonly reported side-effect of the procedure.

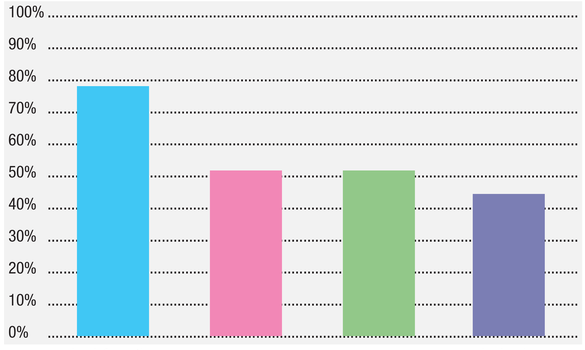
STUDY OBJECTIVE

- Assess the frequency and intensity of pain associated with medical abortion (MToP) for up to 63 days of amenorrhea using a combination of mifepristone and Prostaglandins (PG)

METHODS (Bibliographic Search)

- Large Bibliographic search (PubMed) with Only limit= English
- Key words
  Misoprostol OR mifepristone OR gemeprost AND abortion induced
- Information retrieved for each publication:
  - Therapeutic Regimen: drugs dosage, route of administration, delay between administrations
  - Efficacy: complete abortion, ongoing pregnancy, surgical termination
  - Safety, including
    Pain: systematic analgesics, analgesic consumption, pain levels

RESULTS



RESULTS - PAIN

PAIN LEVEL

- Information regarding pain level: 12/23 studies (Table 1)
- Assessment of pain level very inconsistent
- Pain level reported as rate of patients with
  - (Lower/pelvic/abdominal/Not specified) pain: 3/12
  - Patients with severe pain (VAS>6): 1/12
  - Pain « more than expected »: 1/12
  - Pain and cramps: 1/12
  - Cramping: 2/12
  - VAS mean or median (various VAS): 4/12

FLOW CHART

1459 publications: 654 before 2000, 805 from 2000 to 15/12/2011

Exclusion (N=1173) for
- Non clinical studies
- MToP for medical reasons
- Priming studies
- Pregnancies>1st trimester
- No efficacy and/or safety data

286 publications

Exclusion (N=111) for
- No enough safety data, N=42
- Reviews, meta-analyses, etc., N=25
- Case reports, N=11
- Multiple publication of the same study, N=10
- Others, N=23

175 publications, corresponding to 177 studies (2 publications reported 2 studies each)

1 group (non comparative), N=77 | 2 groups, N=76 | 3 groups, N=15 | 4 groups, N=9

100 comparative studies

- No mifepristone arm, N=18
- Less than 2 misoprostol arms, N=37
- Too short (up to 56 days) or too long (above 63 days) pregnancy duration, N=32

23 studies comparing different mifepristone + misoprostol regimens for MToP up to 63 days

TABLE 1: INFORMATION REGARDING PAIN LEVEL (12/23 studies)

First author, year of publication	Study period	Methodology	Gestation	GR	N	Mife-pristone (mg)	Misoprostol		Pain level
							Route	Dose	
PAIN									
El-Refaey, 1994	<1994	Prospective, randomised study	≤56 days	GR1	75	200	Oral	800 µg	36% experienced abdominal pain
				GR2	75	200	Oral	400 µg	39% experienced abdominal pain
Raghavan, 2009	2005-2006	Prospective, randomised, comparative	≤63 days	GR1	240	200	Oral	400 µg	34%
				GR2	240	200	Sublingual	400 µg	35%
WHO, 2000	<2000	Prospective, randomised, double-blind, controlled, multicentre study	Menstrual delay ≤35 days	GR1	792	200	Oral	400 µg	85% lower abdominal pain
				GR2	797	600	Oral	400 µg	86% lower abdominal pain
SEVERE PAIN (VAS)									
Arvidsson, 2005	<2005	Prospective, randomised, open, pilot study	≤49 days	GR1	48	600	Oral	400 µg	21% (VAS>6)
				GR2	49	600	Vaginal	800 µg	24% (VAS>6)
PAN AND CRAMPS									
Akin, 2009	2004-2005	Prospective, open, multicentre study	≤56 days	GR1	46	200	Sublingual	400 µg	85% experienced pain and cramps
				GR2	161	200	Oral	400 µg	58% experienced pain and cramps
CRAMPING									
Creinin, 2001	<2001	Prospective, randomised study	≤49 days	GR1	40	100	Oral	400 µg	90% reported cramping
				GR2	40	100	Vaginal	800 µg	100% reported cramping
Dahiya, 2011	<2011	Prospective, open, randomised, comparative study	≤56 days	GR1	48	200	Sublingual	400 µg	25% experienced cramping
				GR2	45	200	Oral	400 µg	33% experienced cramping
PAIN assessed by the women as MORE severe THAN EXPECTED									
Winikoff, 2008	2006-2007	Prospective, open, randomised, multicentre study	≤ 63 days	GR1	426	200	Oral	800 µg; 2nd dose in case of nonviable pregnancy at 7-14 days	26% found pain more than expected
				GR2	421	200	Buccal	800 µg; 2nd dose in case of nonviable pregnancy at 7-14 days	30% found pain more than expected
VAS									
Coati, 2007	2004-2005	Prospective, randomised, double-blind, multicentre study	≤8 weeks	GR1	147	200	Oral	400 µg	15% experienced moderate or severe cramping on day 4 2.59 (mean pain score on a 5-point VAS)
				GR2	150	200	Oral	800 µg	24% experienced moderate or severe cramping on day 4 2.6 (mean pain score on a 5-point VAS)
Hamoda, 2003	<2003	Prospective, comparative study	≤63 days	GR1	149	200	Sublingual	600 µg	50 (median;VAS): Overall pain experienced; 63 (median;VAS): Most severe pain experienced; 64 (median;VAS): Pain relief following analgesia use
				GR2	96	200	Vaginal	800 µg	46 (median;VAS): Overall pain experienced; 58 (median;VAS): Most severe pain experienced; 45 (median;VAS): Pain relief following analgesia use
Shannon, 2006	2001	Prospective, comparative, randomised, open-label study	≤56 days	GR1	319	200	Oral	400 µg	5.8 (0-10cm VAS)
				GR2	319	200	Oral	600 µg	6 (0-10cm VAS)
Aubeny, 2000	1996-1997	Prospective, open, randomised, controlled study	≤49 days	GR1	119	600	Oral	400 µg; 2nd dose of 400 µg if no abortion	39mm (100mm VAS) after 1st dose misoprostol; 44mm (100mm VAS) after 2nd dose misoprostol
				GR2	118	600	Vaginal	400 µg; 2nd dose of 400 µg if no abortion	44mm (100mm VAS) after 1st dose misoprostol; 34mm (100mm VAS) after 2nd dose misoprostol

GR, group; VAS, visual analogue scale

DISCUSSION AND CONCLUSION

- Large work was performed
- However, it is very difficult to draw any conclusion regarding pain out of this data
- There is a need for standardised assessment of pain in MToP

CONFLICTS OF INTEREST

CF, SC, TCB, KG, MP, LS received honoraria from Exelgyn for participating in an independent expert board.

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