

# Pain management during first trimester abortion

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# Pain management during first trimester abortion

**In most developed countries, laws were passed during the 1970s**

- Legalizing abortion
- Limiting the practice to medical professionals

## Pain management during first trimester abortion

- **At this time**, doctors were still traumatized from seeing complications of unsafe clandestine abortion. Their main concern was to make abortion safe and effective

**They succeeded**

- **Today** complications from abortions, both surgical and medical, are rare

# Pain management during first trimester abortion

But surgical and medical abortions cause physical pain

- **In the first years** of legal abortion, this was not taken into account by:
  - ◆ doctors worried about efficacy
  - ◆ women relieved to simply have access to legal and safe abortion
- **In 2010, 40 years later, has abortion become painless ?**

# Pain management during first trimester abortion

## **It can be difficult**

- To assess pain:  
psychological parameters can influence it (anxiety, guilt, the attentiveness of medical personnell, etc.)
- To measure pain:  
generally an analogy scale is used  
but when should it be assessed: one or two hours after abortion ? At the follow-up visit ?

**But physical pain is a reality to consider while performing abortions**

# Pain management during first trimester abortion

## **Pain management of surgical abortion in the first trimester**

**3 techniques are used**

1. general anesthesia
2. local anesthesia
3. local anesthesia + analgesic drugs

**are they satisfactory ?**

# Pain management during first trimester abortion

## 1) General anesthesia

Defined as a complete unconsciousness  
under the effect of medications

# Pain management during first trimester abortion

General anesthesia has progressed greatly in recent years:

- the drugs are more effective and less toxic
- their elimination is more rapid
- patients can leave, accompanied, within 6 hours
- in France, like in many developed countries, general anesthesia is safe \*: 0.4 fatalities per 100 000 cases (safer than driving a car)

\* Lienhard A. Inserm. Anesthesiologie 2006

# Pain management during first trimester abortion

## Advantages of general anesthesia

It allows the patient, during the procedure

- not to experience pain
- not to be aware that the procedure is going on

And, therefore, allows doctors to be more efficient and to perform more abortions in the same time period (USA: 15 in a morning)

# Pain management during first trimester abortion

## Disadvantages of general anesthesia

### For women:

- Some are afraid of general anesthesia (fear of not waking up)
- Fear of losing control of their own bodies
- They don't like staying in hospital for 4 to 6 hours

# Pain management during first trimester abortion

## Disadvantages of general anesthesia

For health services it requires :

pre-anesthesia consultation, need for operating and recovery room, presence of anesthesiologist

So this procedure is expensive

Nonetheless it is the only method that allows a pain-free procedure

# Pain management during first trimester abortion

## 2) Local anesthesia

In reality, **it is only the anesthesia of the cervix**

Its aim is to eliminate the pain from its dilatation, but not the pain of uterine contractions during uterine evacuation

# Pain management during first trimester abortion

## Local anesthesia: various techniques

### Various

- anesthetics: lidocaine (Xylocaine ®) only, lidocaine with adrenaline , ropivacaine, mepivacaine\*
- amount of product: 10, 15, 20 cc
- site of injection: intracervical, paracervical

There is no consensus for the best technique

\*Agostini A. Contraception 2008

# Pain management during first trimester abortion

## Local anesthesia: disadvantages

The efficacy of this technique in terms of pain relief is in question

- **Someones** think it makes dilatation less painful and although there has been some improvement from medical dilatation of the cervix : misoprostol 400µg, 3h before abortion or mifepristone 200mg 36 to 48h before
- **For the Cochrane experts\***: no prouves of its efficacy on 1855 patients

\*Cochrane Database Syst Rev, Jan 2009

# Pain management during first trimester abortion

## Local anesthesia: advantages

- drugs are inexpensive
- easy to perform: no need for anesthesiologists, operating or recovery rooms
- allows extremely rapid discharge

**But abortion is not totally painless**  
**It is important to inform patients**

# Pain management during first trimester abortion

## **3) Local anesthesia**

**+ anesthetic drugs**

**Technique in evolution**

# Pain management during first trimester abortion

## Local anesthesia + anesthetic drugs :

### Drugs are various:

1. antispasmodic: phloroglucinol 4ml IM (Spasfon) = placebo\*
2. mild analgesics that reduce pain without affecting level of consciousness:

naxopren

ibuprofen

Small reduction of pain\*\*

\* Zhuang Y. Contraception; 2010 Feb. \*\* Cochrane Database Syst Rev :2009 April

# Pain management during first trimester abortion

## Local anesthesia + anesthetic drugs:

### Anesthetic drugs:

3. morphomimetics used IV (more powerful than morphine):

alfentanil (Rapifen□) is effective in 20'', during 15'

fentanyl (Fentanyl□) effective in 30'', during 30'

sufentanyl (Sufenta□) effective in 60'', during 70'

remifentanyl (Ulyiva□) effective in 60'', during 5'-10'

4. Gaz (nitrous oxyde)

These two last techniques are more efficient\*but not completely

Can they be used without a specialist on site: doctor, nurse ?

Depending on the country regulation : no in France, no in Canada, yes in Holland

# Pain management during first trimester abortion

## In summary for pain management during surgical abortion

- **Local anesthesia** does not bring total pain relief, even with drug-induced dilatation of cervix, but allows a short stay in hospital
- **Local anesthesia + anesthetic drugs** give pain relief. But can they be used without an anesthesiologist ?
- **General anesthesia** gives a total pain relief but necessitates the presence of an anesthesiologist

Patients must be informed and have the possibility to choose the technique they prefer, but it is often utopic until now

# Pain management during first trimester abortion

The use of these different techniques of anesthesia vary a great deal from one country to another

- **Economic considerations** and physicians' habits seem to take precedence
- **Women preference is often not taken into consideration** How to explain that in majority Dutch women choose local anesthesia and American women choose general anesthesia?

**Until now the type of anesthesia depends largely on the doctors and not on the women**

# Pain management during first trimester abortion

## Pain management in medical abortion

# Pain management during first trimester abortion

## Pain during medical abortion is a reality

- It is essentially due to the contractions caused by the misoprostol, mifepristone causes very little pain
- This pain is:
  - ◆ unpredictable
  - ◆ very variable from one patient to another, sometimes mild or significant sometimes intense, awful for 1/3 of patients (Swedish study)\*

\*Kero A. Eu Jour Cont Repro Health 2009 Oct

# Pain management during first trimester abortion

## However pain in medical abortion

- has not been closely studied (tolerance has been studied but different from pain)
- no studies comparing the pain differences in:
  - route of administration of misoprostol: oral, vaginal, buccal or sublingual
  - doses: 400 vs 800 or 400 + 400 (a second dose)

**Logically, with an increased dose of misoprostol, the pain will also be greater, but no studies**

# Pain management during first trimester abortion

Pain medications use in medical abortion are also not very well studied

- One study has shown effectiveness for NSAID \*, However, they are often insufficient for complete pain control
- Some other analgesics are used: paracetamol + codeine, morphine (Acupan®) ? The latter is difficult to use in an office setting
- When should they be given ? Systematically before misoprostol ? On request ?

\* Fiala C, Gemsell-Danielsson K. Hum.repro 2005 august

# Pain management during first trimester abortion

It is important to continue researchs on pain during medical abortion to find

- the painless route
- the painless association mifepristone + misoprostol
- The better pain medication

It is the side effect most feared by patients

# Pain management during first trimester abortion

**Non – pharmacological interventions  
for pain management during abortion  
have been suggested**

# Pain management during first trimester abortion

## Non-pharmacological interventions for pain management:

- acupuncture, hypnosis. These have never been studied and are difficult to use widely
- verbal analgesia. These days it must be viewed only as an adjuvant

Anesthesia or analgesia must be proposed to each woman, as in childbirth where epidural anesthesia has replaced breathing techniques

# Pain management during first trimester abortion

## In conclusion

### In 2010

- Women have obtained the right to safe and effective abortion
- But the use of a good pain control strategy during the procedure is still not offered to every woman: progress are to be made
- A better cooperation between anesthetists and doctors performing abortion would make things better
- Research should be done to finally make abortion painless

### In 2010

women should no longer suffer pain during their abortion