THE VALUE OF KETOPROFEN RECTAL SUPPOSITORIES
IN THE RELIEF OF POSTEPISIOTOMY PAIN

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THESIS

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## INTRODUCTION

Episiotomy is one of the most commonly performed operative procedures in obstetrics. It may be the source of much pain and discomfort for many days after delivery.

Considerable research has been focused on the pain associated with labour and how to control it but less attention has been given to the subject of pain and discomfort resulting from episiotomy.

Many factors can affect the degree of pain due to episiotomy. The use of fine sutures, the proper anatomical restoration of tissues and the avoidance of excessive tension are the responsibility of the surgeon, but still pain is experienced following the trauma to the tissues.

Analgesic drugs were commonly used for the relief of such pain. The aim of the analgesic drug therapy is to provide our patient by a round O clock pain relief, permitting no pain to recure in order to keep the pain threshold high (Bond and Pilowsky 1966).

As prostaglandin has been implicated in the pathogenesis of pain, it is logic to think in an anti-prostaglandin synthetase inhibitor drug.

Ibuprofen has been tried in the relief of post-episiotomy pain (Bloom Field and associates 1974<sup>2</sup>, Hopkinson 1980<sup>3</sup>, Tania 1981<sup>4</sup>). Ketoprofen is also an antiprostaglandin and derivative of propionic acid like ibuprofen.

In this work a review of episiotomy, postepisiotation omy pain, pain and it's measurement, prostaglandin and the pharmacology of ketoprofen was carried out.

In the practical part the normal postepisiotomy pain and, the effect of ketoprofen rectal suppository in the relief of postepisiotomy pain were studied. A trial to identify the appropriate dose, frequency of administration and duration of therapy had been done.

#### **EPISIOTOMY**

It is an operation in which the perineum is incised during labour. Except for cutting the umbilical cord, episiotomy is the most common operation in obstetrics (Pritchard and associates 1985)<sup>5</sup>. Among primigravidae having their first confinement in 1978, in United Kingdom, the incidence of episiotomy was 91%, compared to 21% in 1958 (Buchan and Nocholls 1980)<sup>6</sup>.

This minor operation has many advantages to the mother and the fetus.

## Advantages of episiotomy:

- By use of episiotomy a clean, well-placed surgical incision, is obtained, instead of irregular perineal tear.
- The damage is directed away from the sphincter ani (Greenhill and Friedman 1965)<sup>7</sup>.
- The chief advantage lies in the saving of unnecessary wear and tear upon fetal skull. This is particularily important in cases of prematurity (Ian Donald 1979)<sup>8</sup>.

However, these advantages have been questioned by some individuals, as have most aspects of obstetric care (Coogan and Edmunds 1977)<sup>9</sup>. In parts of U.K. in the past and even today virtually all episiotomies for normal and forceps delivery were and are avoided by "ironing out" the perineum (Hodgkinson 1982)<sup>10</sup>.

## Indications:

There are many indications Ian Donald(1979)<sup>8</sup>
divided them into absolute and relative indications :-

## Absolute indications:

- 1. All cases of fetal distress in the second stage demand episiotomy to spare the child further delay, damage and asphyxia in labour.
- 2. All cases of prematurity as a prophylactic measure to avoid intracranial injury.
- 3. After previous colpoperineorraphy and after any operation for the cure of stress incontinence in which a vaginal delivery has been decided upon.
- 4. In cases of face-to-pubis forceps delivery. The wide biparietal diameter, being posterior, is

overdistending the peri-anal structures. Episiotomy will save the perineum from the risk of major peri-neal rupture. In addition episiotomy will reduce the cranial stress (Clayton and associates 1980)11.

5. All cases of forceps delivery in primigravidae, but it is by no means always necessary, especially if the light Wrigley's forceps is used (Clayton and associates 1980)<sup>11</sup>. It can be avoided if the forceps were removed before the crowning of the head and the mother were left to deliver the head thereafter by her own effort (Basil 1982)<sup>12</sup>.

## Relative indications:

- 1. Outlet contractions: most commonly seen in the android type of pelvis in which the subpubic arch is narrow. When there is enough room in the sagital disaseter the little retreat. Then have emphysically order to escape but in doing so of necessity causes increased tension in the perineum, so a generous relieving incision is essential.
- 2. Perineal ridigity especially in primiparae. The perineum is about to tear with crowning of the head.

An escape of blood from the introitus is often an indication that the vaginal wall is tearing even if the perineal skin is still intact.

The same thing occurs in multiparae when the perineum has been sutured at a preceding delivery (Clayton and associates 1980)<sup>11</sup>.

- 3. When the pressenting part has been on the pelvic floor for more than half an hour.
- 4. Most cases of face presentation excluding anencephaly  $(Ian Donald 1979)^8$ .
- 5. Breech delivery: the time to perform episiotomy
  is when the breech is fully distending the perineum.
  The values of episiotomy here are:
  - i) To avoid the commonest cause of intracranial haemorrhage in breech delivery which is cranial
  - ii) To anticipate and make easter the crincing down of extended arms.
  - iii) To avoid the need for breech with extended legs to flex over the perineum, and thus to facilitate delivery (Clayton and associates 1980)11.

6. Prolapse of cord: when the cord prolapses with late rupture of the membranes in the second stage of labour, and especially if the patient is a multipara, the head will often be showing at the time the complication is discovered. By encouraging the patient to push and by incising the perineum the fetus can be delivered before forceps are available (Clayton and associates 1980)11.

#### Timing of episiotomy incision:

enting part distends the perineum and at the height of a contraction when the tissues are stretched. If episiotomy is performed unnecessarily early, bleeding from the gaping wound may be considerable. However, if episiotomy is performed too late, the muscles of the perineal floor already will have undergone excessive stretching (Pritchard and associates 1980)<sup>5</sup>. Moreover, the intercolumner fascia is destroyed and the levator ani pillars are torn, after which there is little of the pelvic floor to save (Greenhill and Friedman 1965)<sup>7</sup>. In forceps deliveries it is best to defer episiotmy