A STUDY

ON THE IMMEDIATE AND REMOTE PERINEAL CHANGES FOLLOWING EPISIOTOMY OPERATIONS

A THESES

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BY

MOHAMED ASHOUR ALY GIBRIL

SUPERVISORS

PROF. DR. MOHAMED NAGY EL-MAKHZANGY
PROF. OF OB. GYN.
FACULTY OF MEDICINE
AIN SHAMS UNIVERSITY

DR. KHALED M.M.EL-HOUDAIBY
LECTURER OF OB. GYN.
FACULTY OF MEDICINE
AIN SHAMS UNIVERSITY.

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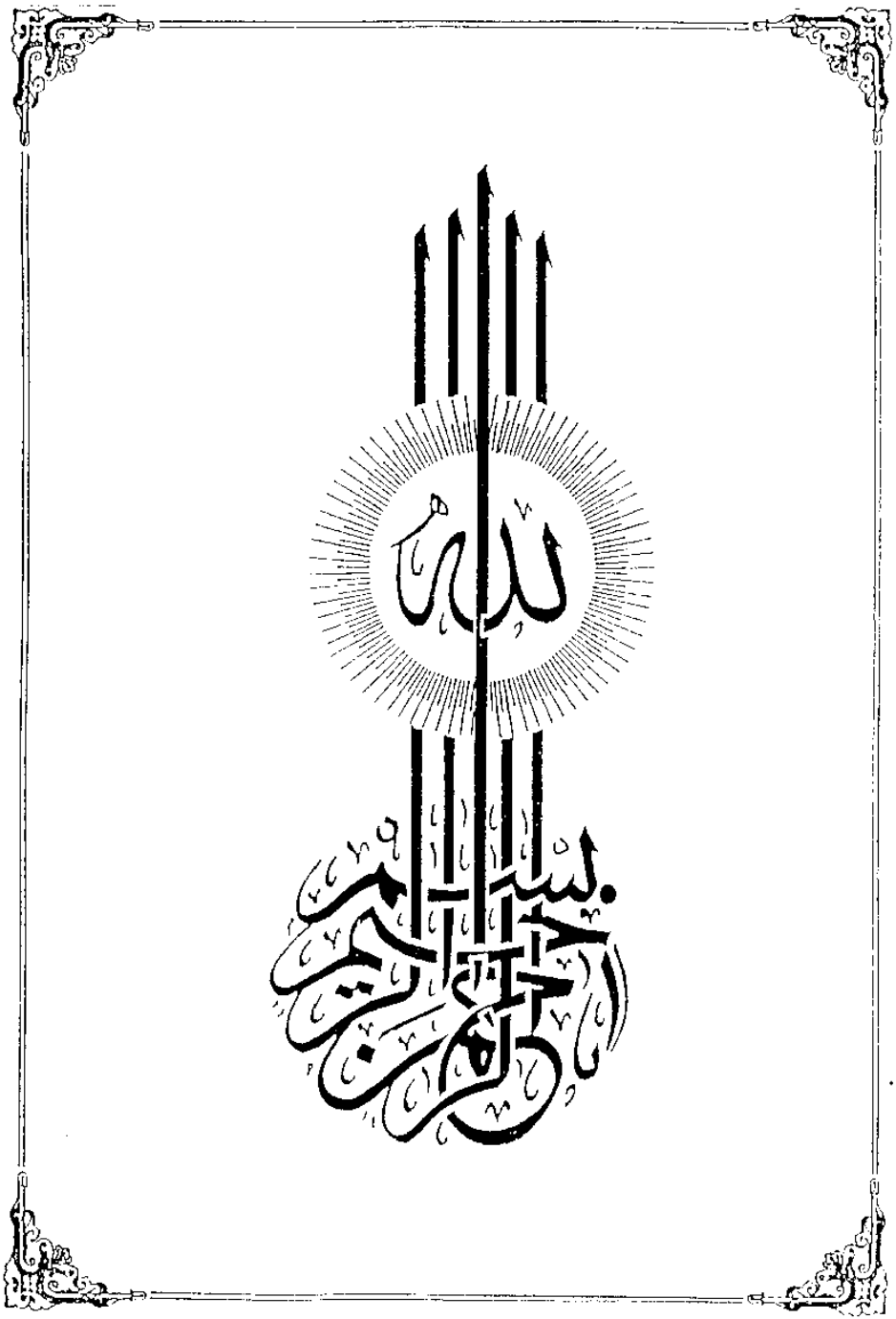

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INTRODUCTION

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Episiotomy or perineotomy is the most common of all obstetric operative procedures(except outting and tying of the umbilical cord) (Barter, 1960; Strasheim, 1964; Coats et al., 1980, Pritchard, 1980; Reading et al., 1982).

The word episiotomy is derived from word episeion, meaning pudenda or vulvar area, and tome, meaning to cut. Thus, episiotomy or perineotomy means the cutting of the vulvar area or perineum during delivery for the purpose of preventing greater maternal or fetal injury (Frisoli, 1981).

The resistance of pelvic bony and soft-tissue structures makes it impossible for virtually all primiparas and many multiparas to give birth without sustaining some degree of injury to some part of reproductive tract. The injury may be limited to one organ alone, or it may involve several adjacent structures. It may be of varying severity and with varying immediate and long-term complications. It may be obvious, as with lacerations and hematomas, or it may be subtle, leading to future pelvic relaxation, uterine descensus, cystocele, or rectocele (Frisoli, 1981). The aim, therefore, is to predict conditions that are likely to give rise to injury and to apply those principles and techniques that prevent or minimize them (Frisoli, 1981).

The essential aims of the episiotomy are two fold: preventing traumatic injury to the fetus by providing more

space and reduced pressure and preventing serious injury to the maternal tissues (Pilkington, 1963; Taylor, 1976, Banta & Thacker,1983).

Although episiotomy is performed more frequently than any other operative procedure in medical practice (Strasheim, 1964), there are practitioners who regard it as a "relic of of the barbaric age" and believe that it should never be done (Hodgkinson, 1958; Shortland, 1958), on the other hand, episiotomy was performed in 80 per cent of all deliveries in the large series reported by Barter (1960). In 1979, episiotomy was performed in 62.5 per cent of vaginal deliveries in the United States (National centre of health statistics, 1979). There also exists on extraordinary variety of opinion as to when, where and how deeply an episiotomy incision showed be made (Shute, 1959). Adaptations of the procedure include complete perineotomy and other more extensive incisions (Norris, 1962; O'Leary, 1965; Schneider, 1963; Taylor, 1963; Walker, 1974; Wendt, 1961).

Controversy also prevails with regard to the most suitable technique and suture material with which to repair these incisions, since all those who practice obstetrics are aware that persistant perineal pain from an episiotomy repair is frequently a disabling complication of the puerperium (Barter et al., 1960).

Since the episiotomy is a clean-cut incision, it is easily repaired, heals well, and gives favourable long-term results (Douglas & Stromme, 1976; Greenhill, 1965; Moir, 1971).

Inspite of that, infection, fistula formation, wound separation, painful scarring and dyspareunia are not too infrequent complications of episiotomy. Less known is the development of endometriosis at the site of episiotomy scar (Paull, 1972).

Symptoms and complications referrable to episiotomy site occasionally mar the immediate puerperium (Livingstone, 1974).

Therefore, carefully designed control trials of benefit and risk should be carried out on the use of episiotomy (Banta, Thacker, 1983).

Episiotomy is already controversial, although no thorough analytic review of the evidence for its benefits and risks has been done (Cogan et al., Editorial, 1968; Haire, 1973; Levett, 1972; Russel, 1982).

HISTORICAL PERSPECTIVE

During the 18th century, Puzos suggested the need for manual support of the perineum. Goodell (1871), in his treatise on the management of the perineum; quotes Aristotle and Galen advocating an assortment of salves and emollients. Harvie (1767) suggested lubrication the perineum and vagina with fresh hog's lard. He stressed the importance of a controlled delivery and described the technique for ironing out the perineum in order to decrease pressure upon it and thus lessen the incidence of lacerations.

Episiotomy was developed during the 18th and 19th centuries. The potential advantages of perineal incision were first discussed by Ould in 1742 who recommended an incision from the vaginal outlet toward the anus of women undergoing extremely difficult deliveries. Michaelis first advised midline incision in 1799, others recommended bilateral incisions pre-perpendicular to the vaginal orifice (Manton, 1885). The term episiotomy was attributed to Braun in 1857, who condemned it as unadvisable and unnecessary (Nugent, 1935). The procedure was introduced into the United States by Taliaferro in 1851, although it was not widely advocated in this country for many years (Broomall, 1878, Savage, 1958). A key report advocating the use of episiotomy was published in German by Gréde and Colpe in 1884 (Wilcox, 1885); Despite the recommendations of Ritgen, Schultze, Créde, Tarnier, J. Marion Sims, and Sir James Simpson, during the remainder of the 19th and

early part of 20th. century the operation was not recognized as part of obstetric teaching, and the average practitioner rarely performed it. Lusk (1890) made no mention of episiotomy, he viewed complete laceration of the perineum with horror because of the fecal incontinence which persisted as a disability for the remainder of the unfortunate woman's life. Suturing of the perineum was described, but when complete lacerations occurred apparently no effort was made to close the mucosa of the lacerated bowel as a separate step in the procedure. Lusk advocated tying the patient's legs together during the puerperium as one of the most important steps in the healing of the perineal lacerations.

After 1900, prominent physicians in the United States such as Stahl and Hirst increasingly advocated the use of episiotomy (Anspach, 1915; Berlind, 1932; Beynon, 1974; Danforth, 1922; Deutschman, 1924; Kelly, 1930; Nugent, 1935).

The popularization of episiotomy began in 1918, when Pomeroy first advocated its routine use for all primigravidas. It became a standard procedure when Delee in 1920 championed the use of outlet forceps and routine episiotomy.

Rucker and Royston in 1930, introduced a new era in perineorrhaphy by using fine suture material and describing a method of repair using superimposed layers of chromic catgut and anatomic closure.

In 1938, Diethelm reflected the opinion of the obstetric community in asserting that the "indications (for episiotomy) are definitely established and need no defense".

Following World War II, routine episiotomy has been increasingly advocated in the United States. As has been pointed out by Eastman (1948), the episiotomy became a significant part of obstetrical care only with the shift in obstetrics from home to hospital. In 1960, Barter et al said that episiotomy was done in 80 percent of all births and virtually all primiparas. In 1979, The National Centre For Health Statistics published that episiotomy was done in 62.5 per cent of vaginal deliveries.

Today, it is estimated that from 50 to 90 per cent of primigravidas undergo episiotomy (Arms, 1975; Cogan, 1977; Conn, 1941; Douglas et al, 1976; Mehl, 1977; Miller, 1960; National Centre For Health Statistics, 1981; O'Leary, 1965; Willrnott, 1980). The reported frequency of episiotomy depends on several factors. For example, primigravidas are much more likely to undergo episiotomy than are multigravidas; the rate in multigravidas is estimated to be about 25 to 30 per cent (Conn, 1941). Episiotomy in home delivery is reported to be less than 20 per cent (Gaskin, 1980; Mehl, 1977; Mehl, 1978).

The rise in the rate of episiotomy in the United States has been paralleled by increases elsewhere although other

countries have lower rates (Banta et al., 1983). The national rate of this procedure in the United Kingdom was 21 per cent in 1958 and had risen to as much as 91 per cent in some hospitals in 1978 (Alberman, 1977; Buchan, 1980). In contrast, episiotomies are done in 8 per cent of deliveries in the Netherlands where over 40 per cent of women deliver their babies at home (Ettner, 1976).

REVIEW OF LITERATURE

The reasons for episiotomy:-

The reasons for episiotomy are stated as follows (Pritchard et al., 1980, Bottoms & Sokol 1981):-

- Avoiding obstetrical lacerations. Planned incisions may be repaired more easily and with better anatomical results.
- Avoiding lacerations involving the rectal sphincter and mucosa. This may decrease the risk of fecal incontinence or fistula.
- Minimizing damage to the muscles of the perineum. This may minimize the change of the later pelvic relaxation.
- Decreasing soft tissue resistance to passage of the fetal head. This may decrease trauma to the fetal brain.
- Decreasing the amount of time the fetus is low in the pelvis. Blood flow through the umbilical cord may be compromised at this time, particularly if there is a nuchal cord.
- Preserving the appearance of the introitus. Episiotomy may be considered a plastic surgical procedure designed to preserve the appearance and function of the introitus as a sexual organ.

Indications of episiotomy:-

Frisoli (1981) stated that since some degree of injury to the soft tissues and compression of the fetal presenting part occurs during all labors, "prophylactic" episiotomy has been proposed for all parturients. McLennan (1974) and Goodlin (1983) stated that early prophylactic episiotomy may be unwise.

Fetal conditions where trauma is more likely to occur and episiotomy is considered specifically indicated include delivery of the premature or oversized infant, breech presentation, occiput posterior or face positions, and operative vaginal delivery with forceps or vacuum extractor (Willson, 1961; Moir, 1964; Greenhill, 1965; Douglas & Stromme, 1976).

Maternal indications include any condition in which a ragged or uneven laceration is likely to occur, such as with a short or scarred perineum, large baby, breech extraction, or operative vaginal delivery. Since the episiotomy is a clean-cut incision, it is easily repaired, heals well, and gives favourable long-term results (Moir, 1964; Greenhill, 1965; Douglas & Stromme, 1976).

Episiotomy is also indicated in prolonged second stage to prevent the overstretching and weakening of the muscles and fascia of the pelvic floor and bladder neck (Frisoli, 1981).