EVALUATION OF THE ROLE OF DIFFERENT METHODS OF BREECH DELIVERY ON THE FETAL OUTCOME AND MATERNAL MORTALITY AND MORBIDITY AT THE DEPARTMENT OF OBSTETRICS AIN SHAMS UNIVERSITY, FACULTY OF MEDICINE

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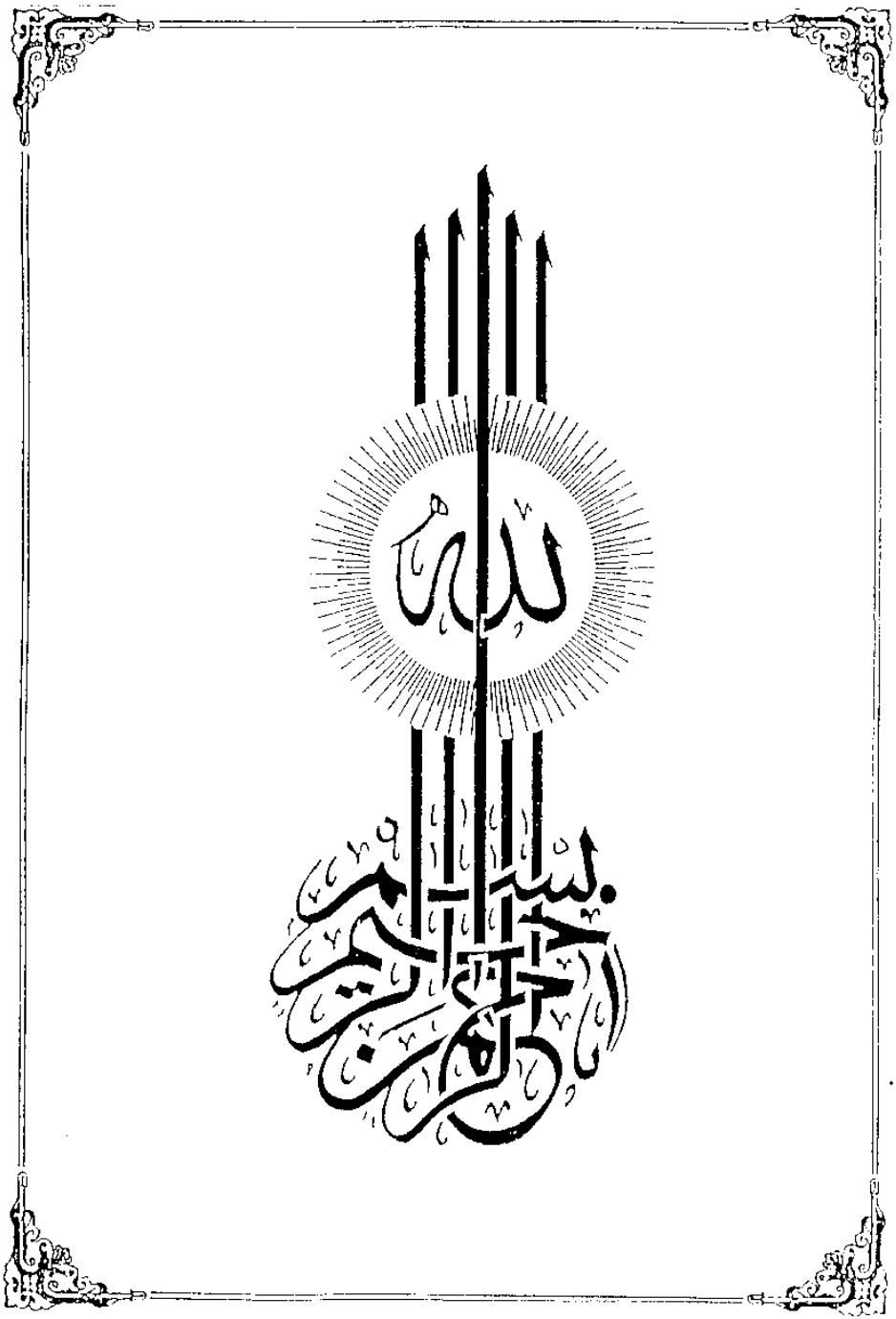
بسم الله الرحمن الرحيم



أَعُوذُ بِاللهِ مِنَ الشَّيْطَانِ الرَّجِيمِ

بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيمِ

وَوَصَّيْنَا الإِنْسَانَ بِوَالِدَيْهِ إِحْسَاناً حَمَلَتْهُ أُمُّهُ
كُرْهاً وَوَضَعَتْهُ كُرْهاً ، وَحَمْلُهُ وَفِصَالُهُ ثَلاثُونَ
شَهْراً .

صدق الله العظيم

"سورة الأحقاف آية ١٥"

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Introduction

INTRODUCTION

Obstetricians, nurses, and most of the patients know that a breech birth is a cause for concern.

Breech presentation is recognised as an obstetric abnormality. It is classified as such not because of its relative infrequency, but more significantly because of its association greater than normal with complications of pregnancy (e.g congenital abnormality, premature deliveries and its higher risks than normal (regardless the duration of pregnancy).

Breech presentation is one of the commonest abnormal presentation. Expert management during pregnancy and delivery is essential to obtain best result.

Fetal morbidity and mortality with breech delivery, particulary in the primigravidae, have been the subject of many articles in medical literature.

Because the fetus faces many risks, opinions have differed as regards the management of breech delivery at term.

These range from attempts to deliver most fetuses vaginally to routine use of cesarean section, although cesarean section enhances maternal risk and may also affect future pregnancies.

Gimovsky (1983) stated that the perinatal mortality of breech delivery is ten times greater than cephalic presentation with unexperienced obstetrician.

REVIEW OF THE LITERATURE

Definition:

Breech presentation or pelvic presentation is defined as a longitudinal lie in which the caudal pole of the fetus is the presenting part occupying the lower uterine segment and the cephalic pole occupies the fundal segment (Benson, 1976).

Incidence:

The overall breech presentation may be expected in 3-4 % of women in labour, although it may occur in as high as 7% of pregnancies at 32 weeks (Collea, 1980).

In a study which included large series of breech presentation (16,327 cases), Morgan and Kane (1964) reported a breech presentation incidence of 4.03%. However, when neonatal weight was taken into consideration, Benson (1976) reported a breech presentation incidence of 3.3% among the patients who had delivered a neonate weighing 2.500 kg or more, while, the incidence was 23% of the patients who had delivered a neonate weighing from 500 gm to 2499 gm.

Hall and Kohl (1956) reported that 14% of the cases of breech delivery have a history of previous breech delivery. However, a history of recurrent breech presentation has been reported in 20% of the cases presenting at term with breech presentation. (Mac Donald, 1980).

Etiology:

The factors which influence the occurrence of breech presentation on the part of the mother are, pelvic malformation, septate uterus a tendency to arcuate uterus, placenta previa and pelvic tumours, and on the part of the fetus, prematurity malformation, the intrauterine fetal death and multiple prelgnancy but in many cases, none of these factors is present and consequently no explanation can be given for the presentation (Mair 1971).

In a study which included 909 cases of breech presentation, the chief associated conditions were breech with extended legs in 37.3%, multiple pregnancy in 23.6%, prematurity in 9.1%, and placenta previa in 3.2%. However, no definite abnormalities could

be detected in the rest (22.9%) of the cases (Varton, 1945).

1. **Prematurity:**

Prematurity itself is the most common single cause of breech presentation. In the study of Morgan and Kane (1964) which included 16,327 cases of breech delivery, premature labour has been reported in 10%.

In many cases in which breech delivery occurs prior to the 34th week of gestation, the fetus has simply not yet converted to cephalic presentation, fortunately until about the 32nd week of gestational age the amniotic cavity is large in relation to the fetus mass, and there is no crowdening of the fetus by the uterine walls. As pregnancy progresses, there is a relative diminution in the liquor, the uterine walls become more closely opposed to the fetal parts, only then does the piriform shape of the uterus exert its effect, where the entire podalic pole of the fetus which is more bulky and mobile than the head, moves to occupy the more room space which is the fundus, and the head presents in the lower uterine segment (Green Hill 1976).

2. **Extension of the leg:**

Varton (1945), suggested that the extended lower extremeties of the fetus with frank breech essentially act as splint for the fetal body, limiting the fetal movement and preventing the fetus from actively converting to the cephalic presentation. He further suggested that this splenting action of the lower extremeties accounts for the difficulty on performing external cephalic version in some patients.

Why the legs become extended? is still unknown. The fetus while lying as a breech is always kicking with its legs. There may come a time, especially with scanty liquor (this is often notable in breech presentation), when it is unable, because of the resistance of the lower uterine segment which is the less roomy part of the uterus, to draw back one or both of its legs, which will then remain extended. This would fit with the frequent occurrence of this abnormality in primigravida, where the tone of the uterus is likely to be greater. Certainly. extended legs are not often, if ever seen in x rays when the vertex presents (Donald 1969).

3. **Multiple pregnancy:**

The relative frequency of presentations of the fetus in cases of multiple pregnancy were investigated and reported in the literature. In the study of Glsgow Royal Maternity Hospital by Kauppila(1971), the precentage of breech presentation, in the leading fetus of the twin pregnancy was 30.3%.

Breech presentation is common in twin pregnancy because of the limited space available for spontaneous version.

4. **Cornuo-fundal insertion of the placenta:**

Stevenson (1951) suggested that the position of the implanted placenta in the near term or term human uterus, as it indents and alters the ovoid shape of the uterine cavity determines the polarity of the uterus. Cornuo-fundal insertion of the placenta might reverse uterine polarity. Functionally, the fetus accomodates itself to the shape of the sac, so the fetal head seeking its smaller pole (fundus).

Recently, the frequency of cornu-fundal implantation of the placenta in association with breech