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HYSTEROSALPINGOGRAPHIC EVALUATION OF PREVIOUS UTERINE SCAR

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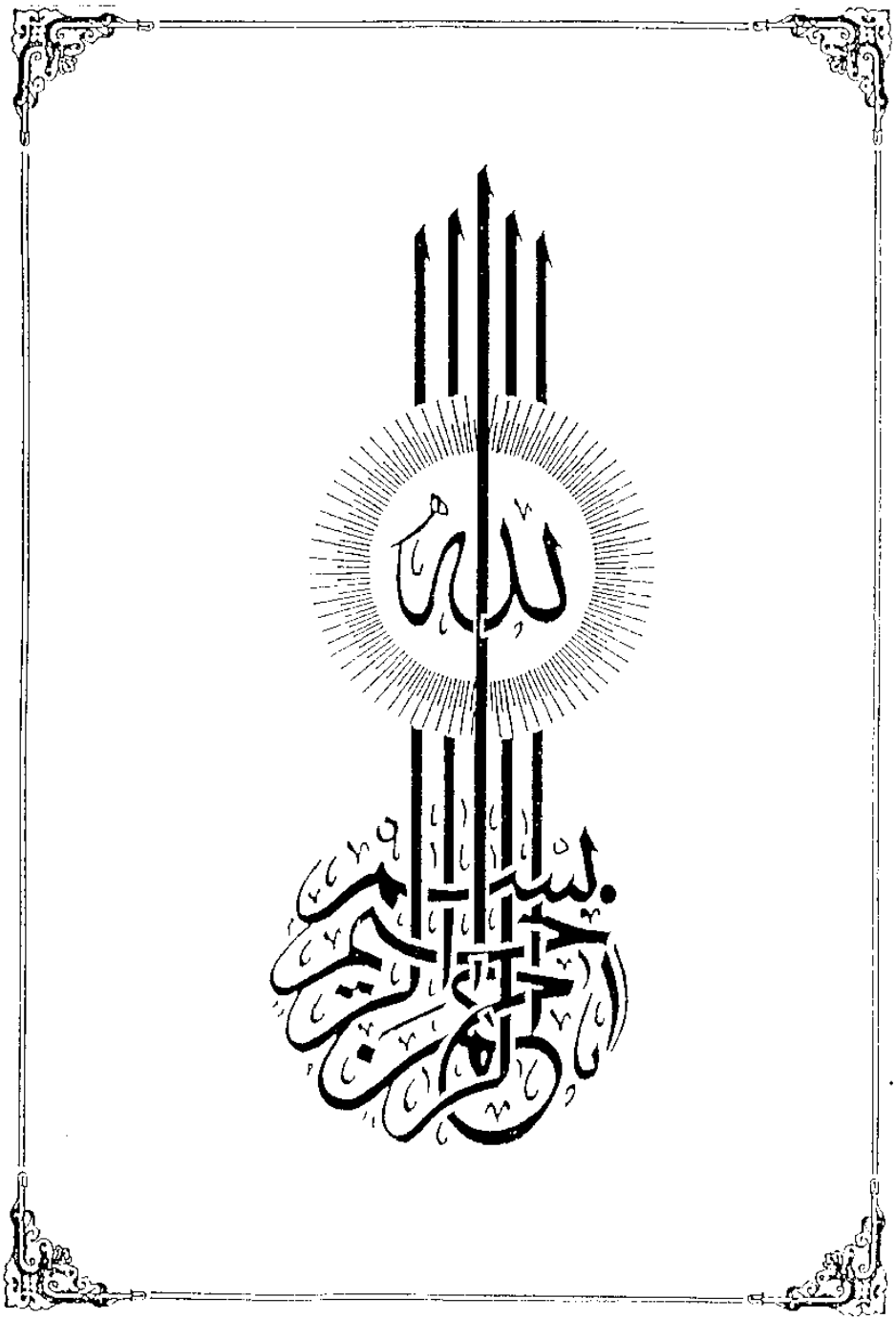

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INTRODUCTION

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The clinical evaluation of the uterine scar during pregnancy or in labour is usually difficult, and in some cases may be misleading, as the imperfect healed scar may disrupt during labour or even before the onset of labour.

Amniography, hysteroscopy and hysterosalpingography are all used to evaluate the previous uterine scars, but the ideal method of assessment of previous uterine scar remains to be discovered.

Waniorek, (1966) reported that, hysterosalpingography has proved to be the most objective method for evaluation of the quality of the uterine scar.

Poideven and Bockner, (1958) advised hysterosalpingographic studies after cesarean section to minimize the risk of ruptured uterine scar in subsequent pregnancy and delivery.

Scar deformities were evaluated on the basis of depth, shape and size, a regular outline of the anterior uterine wall and small deformity were considered as

evidence of a well healed wound, A medium sized deformity implied a less favourable healed wound, while large deformity and penetration of the dye into the uterine wall at the level of the deformity implied a defective healed wound **(Waniorek, 1967).**

Poidevin, (1961) and Waniorek, (1967) classified the scar defects into mild, moderate and severe according to the degree of the deformity and therefore the coming pregnancy and labour can be managed much better.

AIM OF THE WORK

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The objective of this study is to, investigate the rate and extent of uterine cavity deformity and scar detection in prior uterine surgery patients.

REVIEW OF LITERATURE

UTERINE SCAR

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One of the major problems facing obstetrician is to attend a case of labour with uterine scar. The obstetrician does not want to do unnecessary cesarean section and at the same time he afraid of exposing the mother and foetus to more morbidity or even mortality if the scar gives way.

The common uterine scars are cesarean section scars (classical and transverse lower segment), scar of previous ruptured uterus and myomectomy scar.

The cesarean section scar :

The behaviour of a classical scar, that is ,a uterine incision through the body of the pregnant uterus rather than the lower uterine segment, in any subsequent pregnancy differs from that of a scar confined to the lower uterine segment. First the probability of rupture of a classical scar is several times greater than that of a lower segment scar. Second, if a classical scar does rupture, the accident takes place before labour in about one third of the

cases. Lower segment scars that are confined to the non contractile portion of the uterus rarely, if even rupture before labour, and only infrequently do so, during labour **(Pritchard and Macdonald, 1980).**

Lazarus (1978) described disruption of a previous classical cesarean section scar at 12 weeks gestation with marked haemorrhage and hypovolaemia.

Dewhurst, (1957) concluded that, at that time, the classical scar rupture rates were 2.2 percent for all pregnancies reaching viability, 4.7 percent when women were allowed to enter labour, and 8.9 percent when vaginal delivery occured. The comparable figures for transverse lower segment scars were 0.5 percent, 0.8 percent and 1.2 percent respectively. It is often assumed that dehiscence of lower segment scar usually occurs during labour yet there is clear evidence that windows can be present throughout the pregnancy and that they represent a primary fialure in healing at the time of the original section. These defects may be detected by hysterosalpingography which may reveal a

permanant uterine fistulae **(Baker, 1955).**

It might be argued that the more sections a woman has the more likely is her lower uterine segment to be weakened. At the same time a large number of dangerous scars are found in women who have had only one previous section.

Barbara et al., (1971) found that the incidence of ruptures and window formation was no higher in women who had one or more vaginal deliveries interposed between the primary and repeat section. They said that a section scar is always suspect no rather how many times a woman has safely delivered vaginally since the original operation.

It is now clear that the occurence of uterine infection after section, and even breakdown of the abdominal wound requiring resuture did not prejudice adversely the ultimate state of the scar in the lower segment.

Scar of previously repaired ruptured uterus :

The suturing of a ruptured uterus is a safer immediate

treatment than hysterectomy and it is strongly indicated when:

-The patient's general condition is poor.

-The tear is recent, not bilateral and not unduly ragged.

-A further child is desired.

Sheth (1968) studied cases of pregnancy following repaired ruptured uterus, he found the following results:

-In 17 pregnancies after rupture of the lower segment the rupture recurred in one.

-In 4 pregnancies after rupture of the upper segment the rupture recurred in three.

So, he advised that cases of previous rupture of the upper segment should be kept in hospital from as early as the 28th week and elective cesarean section done at 36th week or sooner, but cases of lower segment rupture should be admitted at the 36th week and elective cesarean section done at 38th week.