THE USE OF ULTRASOUND PARAMETERS AND VIBROACOUSTIC STIMULATION IN THE EARLY INTRAPARTUM PERIOD AS A PREDICTIVE OF THE SUBSEQUENT FETAL CONDITION

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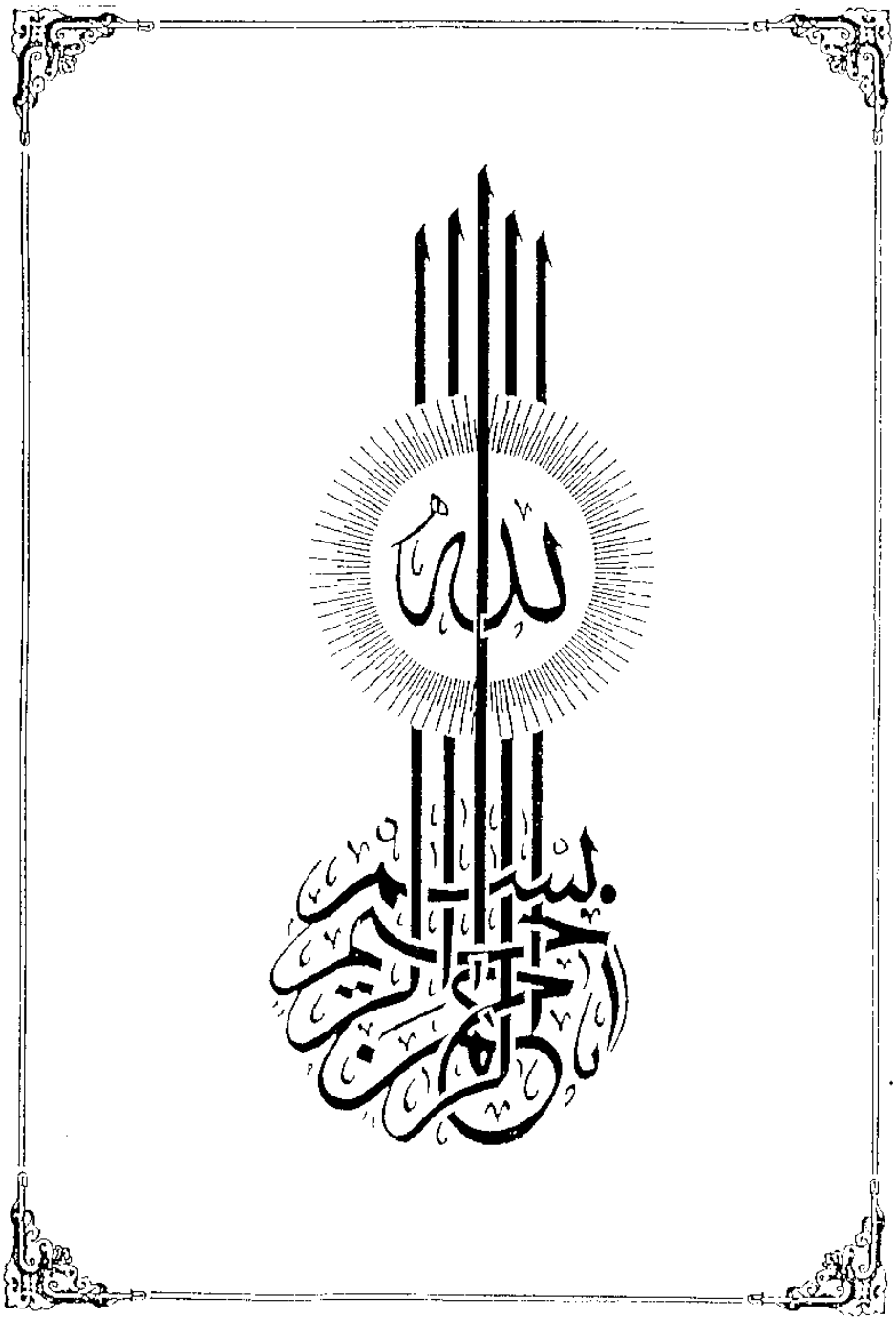

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LIST OF ABBREVIATIONS

A.F.	: Amniotic fluid volume.
A.F.I.	: Amniotic fluid index.
AFP	: Alpha fetoprotein.
AT	: Admission test.
bpm	: Beat per minute.
B.P.S.	: Biophysical profile Score.
C.N.S.	: Central nervous system.
C.T.G.	: Cardiotocography.
C.S.	: Cesarian section.
C.S.T	: Contraction stress test.
C.V.S	: Chorionic villus samplinj.
F.B.M	: Fetal breathing movements.
F.H.R.	: Fetal heart rate.
F.M.	: Fetal movement.
F.T	: Fetal tone.
G.B.M.	: Gross body movements.
H.C.G.	: Human chorionic gonadotrophin.
H.P.L.	: Human placental lactogen.
N.S.	: Not Significant.
N.S.T	: Non-Stress test.
O.C.T.	. Oxytocin challenge test.
R.D.S.	. Respiratory distress syndrome.
Sig.	: Significant.
V.A.S.	: Vibroacoustic stimulation.

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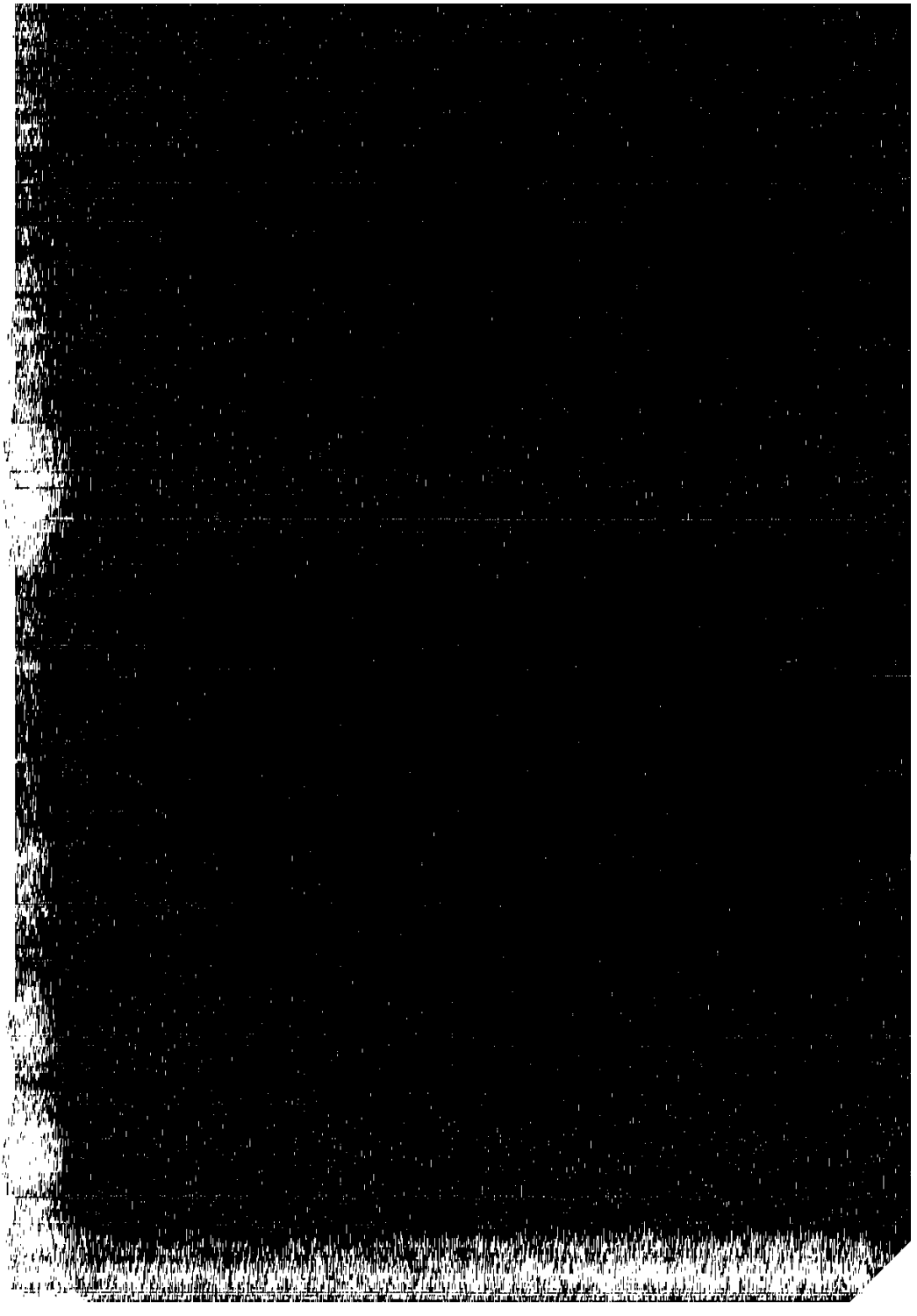

INTRODUCTION

During the past two decades, remarkably detailed knowledge of the human fetus and its immediate environment has accumulated. Indeed, the fetus is no longer regarded as a maternal appendage ultimately to be shed at the whim of biological forces beyond control (Cunningham et al., 1989).

Electrical fetal monitoring has not been shown to be superior to properly performed intermittent fetal auscultation (Thacker, 1987 and Leveno et al., 1986).

Fetal acoustic stimulation as a tool for the assessment of fetal condition has recently received much attention in the literature (Sarno et al., 1990b).

Several investigators have evaluated the usefulness of acoustic stimulation as an adjunct to antepartum testing (Trudlinger and Boylan, 1980 and Serafini et al., 1980).

Read and Miller, (1977), compared the fetal response to acoustic stimulation with the contraction stress test.

The safety of fetal acoustic stimulation and standardization of the technique have been questioned (Romero et al., 1988).

Transabdominal acoustic stimulation with an artificial larynx procedures intrauterine sound levels of 91 to 111 dB, a

level that should not pose major fetal risks. In conclusion, fetal acoustic stimulation in the early intrapartum period appears to be a reasonable technique for consideration of the fetus as a high or a low-risk one. Such information may be helpful to the clinician managing patients in labour (Sarno et al., 1990b).

Manning et al., (1990), proposed five discrete biophysical variables as a method of an intrapartum assessment including fetal breathing movements, fetal heart rate, fetal body movements, fetal tone and amniotic fluid volume.

Clinical studies indicate varying predictive accuracy for each individual variable and the combination of variables always improve the predictive accuracy (Baskett et al., 1987 and Manning et al., 1990).

Manning and associates, (1987b) have modified their original biophysical profile by selective use of the non-stress test.

Eden et al., (1988) began with the non-stress test and if reactive, they assessed amniotic fluid volume that they consider normal if a 2 cm pocket is identified.

AIM OF THE WORK