HEARING PROFILE IN NORMAL PREGNANCY

Thesis Submitted in Partial Fulfilment

of the Master Degree in

AUDIOLOGY

By

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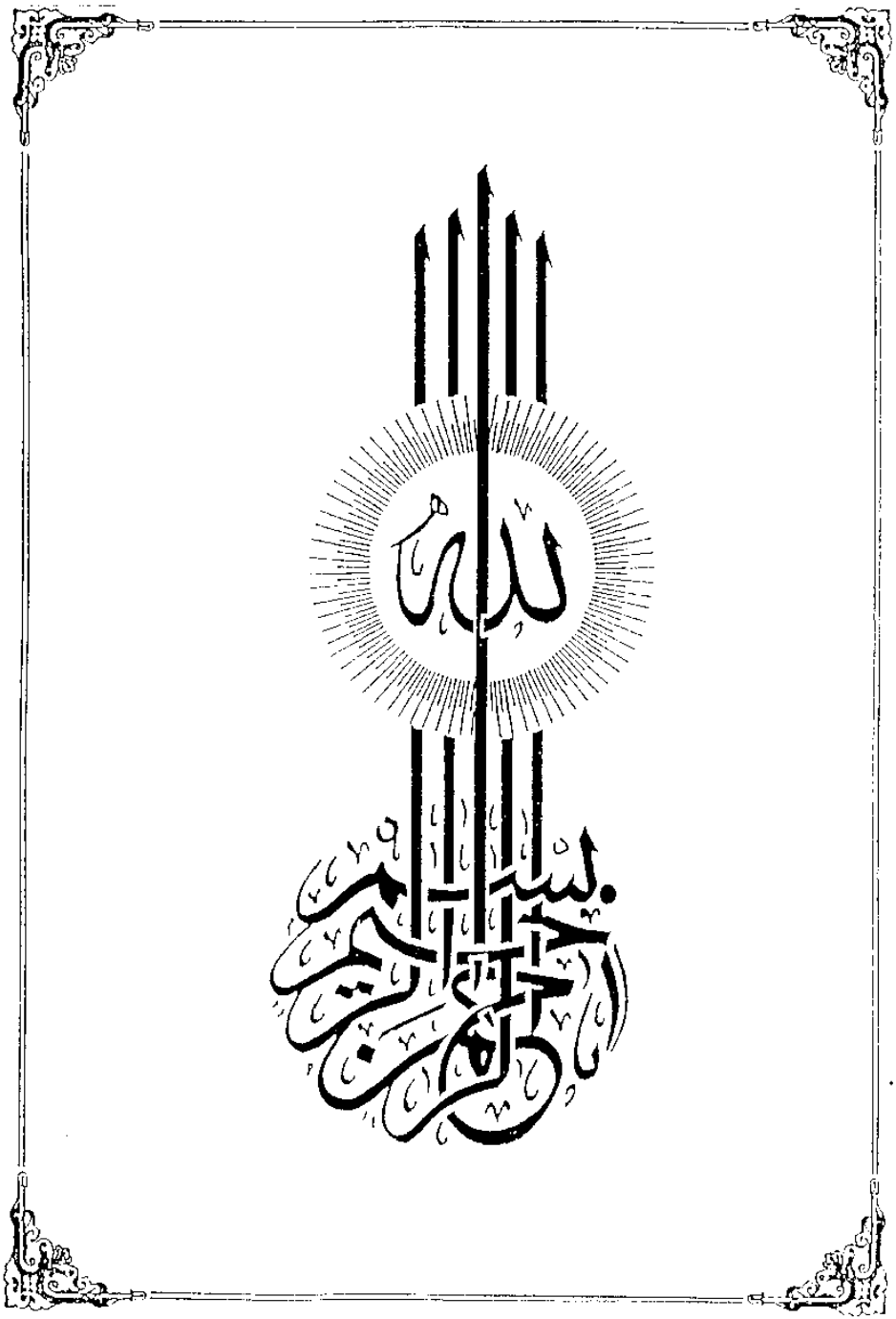

'CKNOWL.

« To the memory of my Mother »

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Pregnancy is a physiological process that starts from the fertilization of a mature ovum by a mature sperm. The normal duration of pregnancy is estimated as 40 weeks (280 days) ± 2 weeks, calculated from the first day of the last menstrual period in patients with regular monthly cycles.

Pregnancy is a state of continuous physical adaptation to meet and indeed to anticipate the demands of the growing fetus and to provide a stable environment in which its growth can take place. The degree to which this adaptation takes place is generally in excess of fetal needs, so that there is a considerable reserve capacity to meet periods of stress or deprivation without altering the fetal environment. The changes that occur involve almost every system in the body (J.C. McClure Browne, Geoffrey Dixon, 1978).

The endocrine alterations that accompany human pregnancy are among the most remarkable recorded in human physiology or pathophysiology. Consider the following. In the pregnant woman, at or near term, there is a daily

production of 15 - 20 mg of estradiol 17 B, 50 -100 mg of estriol, 250 - 300 mg of progesterone, 1 - 2 mg of aldosterone; and 3 - 8 mg of deoxy corticosterone (DOC).

Furthermore, there are strikingly increased levels of plasma renin, angiotensinogen, and angiotensin II, together with the daily production of 1g of human placental lactogen (HPL); massive quantities of human chorionic gonadotropin (HCG); and likely human chorionic thyrotropin (HCT), chorionic ACTH, and possibly chorionic TRH, LHRH, and Somatostatin. Thus, the most remarkable physiologic event of pregnancy may be the establishment of mechanisms by which the gravid woman and her fetus adapt to this unusual endocrine milieu(Simpson and Mac Donald, 1981).