

**Sonographically Detected Hyperechogenic
Fetal Bowel Significance and Implication
for Pregnancy Management**

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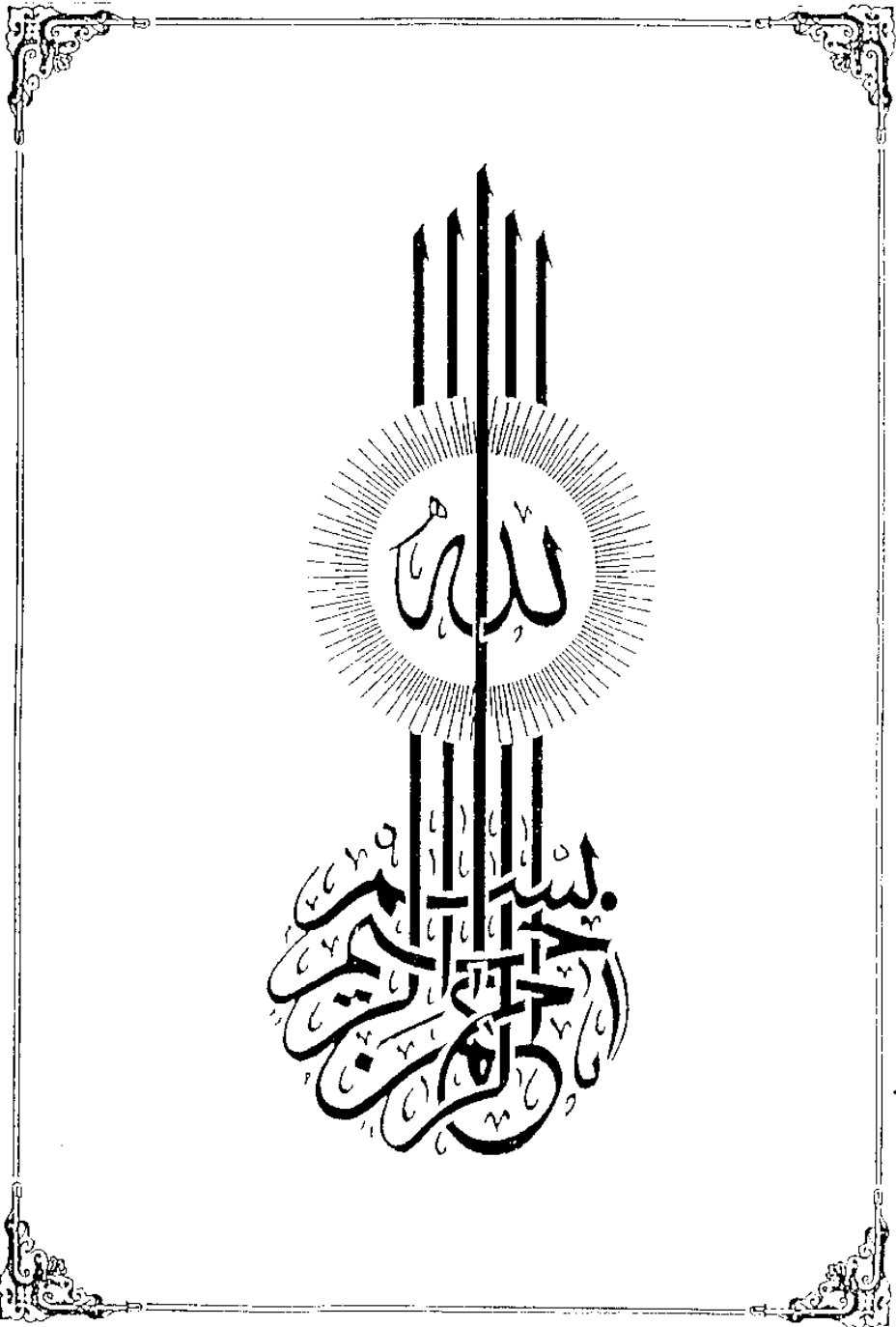
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Introduction and Aim of Work

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INTRODUCTION AND AIM OF WORK

Medical ultrasound allowing non invasive visualization of the fetus, enables us to study many aspects of pregnancy to an extent previously unattainable. Consequently, its use and availability with a range of advanced facilities such as gray scaling and real time imaging have expanded so that obstetric ultrasound has become in many aspects not only an accessible and valuable but also an essential tool for the obstetrician and should be available at all time in the maternal fetal unit (*Jassani et al., 1982*).

With ultrasound it was possible to examine internal fetal anatomy and to identify abnormalities of the fetal cranium, spine, chest, abdomen and limbs. The recent advent of high resolution sonography has allowed extensive evaluation of fetal gastrointestinal tract. It is worth mentioning that fetal bowel is routinely visualized by ultrasound examination during second and third trimester of pregnancy. The characteristic ultrasound changes that can be documented in the fetal intestine appear to be related to the amount of meconium being affected by the efficient peristalsis. Meconium being transonic substance when accumulates in the intestine distends the walls and creates many interphases (*Lince et al., 1985*).

Echogenecity of the fetal bowel is determined in relation to echogenecity of the fetal liver. The detection of hyperechogenic fetal bowel is very important in evaluation and diagnosis of congenital abnormalities and so it is suggested that whenever hyperechogenic fetal bowel is encountered appropriate

pregnancy management should be done by other biochemical and chromosomal studies.

The Gastrointestinal tract is not only one of the common site of birth defects, but it is also the one where in lies the greatest hope for successful neonatal outcome. The value of prenatal diagnosis in a comprehensive perinatal approach to bowel abnormalities is emphasized, forewarning the obstetrician and alerting the pediatric surgeon for resuscitation, immediately postnatal evaluation and timely intervention to decrease neonatal mortality and increase the chance of long term infant survival (*Dicke and Crane, 1992*).

Embryology and Normal Ultrasound Fetal Anatomy

