# INTRODUCTION AND AIM OF THE WORK

Adaptation to extrauterine life is a challenge to the kidney of the newborn infant, which must respond to rapidly growing functional requirements and may have to respond to various endogenous and exogenous stresses . A normally developed kidney in full-term (F.T) neonate can usually cope with most of the demands, but external conditions may besevere enough to overcome its adaptive capacities (Feldmann and Guignard., 1982) .

Acute renal failure (A.R.F.) is a clinical syndrome which follows an impairment of the kidneys ability to regulate urine volume and composition according to body's need (Jain , 1977) . In the past decade, A.R.F. has been recognized with increased frequency in newborn infants (Mathew et al., 1980), and has multiple causes and pathogeneses each of which will have a different prognosis . Critical illness which may cause, predispose or precipitate ARF in the neonatal period are many including anoxia (Strauss et al., 1982).

Acute or chronic hypoxia may results in the passage of meconium in utero (Cole et al., 1985) .

The diagnosis of ARF is frequently difficult to make because many of the clinical and biochemical findings that are helpful in establishing the diagnosis of ARF in adults and children are unreliable in neonates . Measurement of urinary excretion of retinol binding protein after birth is helpful in the early diagnosis of ARF

(Roberts et al., 1990) .

The aim of this work is to assess the kidney function in F.T. neonates with meconium-stained amniotic fluid in the first day of life, as reflected by blood urea, serum creatinine, creatinine clearance (Ccr) and urinary excretion of albumin , (UA), total protein (Up), and retinol binding protein (UR.B.P.) .