INTRODUTION AND AIM OF THE WORK

INTRODUCTION AND AIM OF THE WORK

Neonatal sepsis is a clinical syndrome characterized by systemic signs and symptoms and bacteremia during the first month of life ***(Odio, 1995)*** . Inspite of the use of the potent antibiotics and intensive supportive care, sepsis is still a major cause of morbidity and mortality during the neonatal period ***(Adriaanse , 1996)*** .

Bacterial sepsis leads to many metabolic disturbances including disturbances in glucose which is the main source of energy for brain growth and metabolism , insulin hormone which plays a central role in glucose homeostasis and lactate which is an intermediary in carbohydrate metabolism ***(Bailey et al ., 1990)*** .

Yeung , (1970) first demonstrated hypoglycemia in term neonates with gram-negative infection . Again , ***Yeung et al ., (1973)*** reported that in 8-day old term infected infants , a more rapid glucose disappearance rate has been reported, hyperinsulinemia was not present to explain the increased glucose disappearance. Almost a decade later , increased glucose disappearance rate again without hyperinsulinism was reported in infants with sepsis at a mean age of 21 days by ***Leake and Fiser, (1981)*** . The proposed mechanisms of sepsis associated hypoglycemia include increased metabolic rate , altered glucose production and increased insulin sensitivity ***(Pildes , 1986)*** .

Lactic acidosis is frequently seen in critically ill - patients but has not been emphasised in neonatal sepsis . The causes of elevated lactic acid concentration include tissue hypoperfusion (i.e. hypoxic - anaerobic metabolism), liver dysfunction including impaired gluconeogenesis and sepsis ***(Mizock and Falk , 1992)*** .

The aim of this study is to clarify the effects of sepsis on blood glucose, lactate and insulin in neubora infants with bacterial sepsis .