ABSTRACT

BACKGROUND:

In pregnancy, acute renal failure occurs in women usually with previously healthy kidneys, but it can complicate the course of patients with pre existing renal disease. Acute renal failure may be defined as a sudden decrease in renal function characterized by increase in nitrogenous products and reduced urine output.

The causes are divided in to those occuring during early pregnancy due to sepsis, hyperemesis etc. and during late pregnancy like antepartum and postpartum haemorrhage, hypertensive disorders of pregnancy, abruption, sepsis etc. Acute tubular necrosis is the most common pathological lesion.

AIMS AND OBJECTIVES:

To determine the incidence of pregnancy related acute kidney injury, its clinical spectrum, mortality and morbidity in pregnancy.

METHODOLOGY:

We at Coimbatore Medical College have undertaken a prospective clinical study in 34 patients. The patients are evaluated for renal failure by various investigations. Investigations included complete blood count, renal

function tests, liver function tests, serum uric acid, urine analysis, 24 hours urinary protein, peripheral smear study, ultrasound obstetrics with maternal organs were carried out as and when required. Results are entered in an excel sheet and compared with maternal outcomes to and out values contributing factors for maternal mortality.

RESULTS:

Out of 34 patients 47 % were in the age group of 21 to 25 years. Most of them are multi gravidas and Acute kidney injury is more common in the third trimester and post natal period. The commonest etiology is hypertensive disorders of pregnancy. DIVC is the most commonest cause of death .21 patients recovered from acute kidney injury without any major complications .13 patients died due to acute kidney injury and its complications. Perinatal mortality is high due to preterm and its complications.

CONCLUSION:

According to my study ,the incidence of Acute Kidney Injury in pregnancy in Coimbatore Medical College Hospital , Coimbatore is 4-5 per 1000 deliveries. Acute Kidney Injury in pregnancy is associated with high maternal morbidity and mortality. Hypertensive disorders of pregnancy is the commonest cause in 20 cases. Renal failure developing in the postnatal

period carries poor prognosis and has very high mortality rate. Odema is not a significant symptom. Patients presented with shock carries high mortality rate. Patients with anuria had bad prognosis.Patients presented even late with very high creatinine levels (>5 mg/dl) did not have high mortality.Patients who had electrolyte disturbances in the form of hyperkalemia, hypocalcemia and hypernatremia had high mortality rates.Patients with high uric acid levels(10 mg/dl) and abnormal LFT had bad prognosis. Incidence is high in the multi gravidas and in the third trimester.

Perinatal mortality is high due to preterm (< 32 weeks) and its complications.

KEY WORDS:

Acute kidney injury, Hypertensive disorders of pregnancy, DIVC, Postpartum haemorrhage, Serum creatinine.