# SURROGATE PREDICTOR OF PREGNANCY RELATED ACUTE KIDNEY INJURY (PRAKI)-A HOSPITAL BASED STUDY

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## INTRODUCTION

Pregnancy Related Acute Renal Injury (PRAKI), a rare but life threatening complication of pregnancy

#### AIMS

Aim of the study was to evaluate the incidence and causes AKI in obstetrics and final outcome and surrogate predictors of AKI in obstetrics

### METHOD

All Pregnant and postpartum women, booked or unbooked cases attended or admitted in the hospital were included in this study (May 2012-April 2013), detail demographical, clinical and laboratory data was evaluated and followed till death or discharge. Surrogate predictors were evaluated of AKI in pregnancy .Univariate analysis followed by multivariate analysis was done keeping death as end point. Other parameters were calculated using suitable statistical tool.

## STATISTICAL ANALYSIS

Appropriate parametric and non-parametric statistical tests were performed to check any significant difference, correlation and association of parameters with the disease state. Chi-Squir test used to analysed nonparametric data and calculation of 'p' value, data are also plotted in percentage form wherever needed.

Univariate analysis followed by multivariate analysis done and predictors were determined.

## CONCLUSION

Incidence of pregnancy related acute renal injury (PRAKI) though decreasing; it is still highly fatal with sepsis.

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## RESULTS

Out of 9270 deliveries (May 2012-April 2013) 79 women developed PRAKI with an incidence of 0.87%. The age of the patients ranged between 17 to 40 years with a mean of 23.23±5.05 years. About 40.5% cases were below 20 years of age. Majority of them (92.44%) were of poor socio-economic status. 68 out of 79 (86.1%) of women were illiterate. Pregnancy related AKI is more common in primipara patients and mostly seen in postpartum period (78.9%). Of them majority were referred cases (84.81%). The most common cause of PRAKI was sepsis 32 (40.51%) mainly due to puerperal sepsis followed by Pregnancy induced hypertension (PIH) 20(25.32%) and postpartum hemorrhage 17 (21.53%). Most patients recovered completely .59(74.68%) ,13 (16.46%) patients died and 7(8.86%) patients left against medical advice. The case fatality rate was 16.46%. Creatinine ranged from 1.5 to 18.2 mg/dl with an average value of 4.53±3.237mg/dl. Almost half of the patients needed haemodialysis ranging from 2-21 sessions. Most of the patients with sepsis (17 of 32). Maternal death was also more in patients having sepsis (5 of 32). Sepsis, shock at presentation, severe anaemia, severe bleeding, late referral though came as surrogate predictor in univariate analysis, sepsis came out as independent predictor of death following PRAKI.



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