

# Characteristics, risk factors and outcomes of Pregnancy related Acute Kidney Injury: A Middle-east tertiary center experience

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May 18, 2020

## Abstract

**Abstract** Introduction Acute kidney injury in pregnancy, while is now a rare entity in the developed countries, it is still a common issue in developing countries representing a major cause of maternal and fetal morbidity and mortality. Scarce data are published regarding PRAKI in Middle-east and African countries. Here, we present our experience in Mansoura University Hospital; an Egyptian tertiary care hospital. **Methods** This is a prospective observational study that included all patients with pregnancy related Acute Kidney Injury admitted to Mansoura Nephrology and Dialysis Unit over two years. All patients were prospectively followed for three months. All patients were evaluated regarding their maternal, fetal and renal outcomes. Results Preeclampsia and peri-partum hemorrhage constituted the most common causes of PRAKI. Maternal mortality occurred in 22.5% of patients. Regarding patients' renal outcomes, the major portion of patients (62.5%) fully recovered while the remaining (37.5%) didn't recover and became dialysis dependent. Fetal unfavorable events occurred in 31 pregnancies (77.5%), where 10 babies (25%) were delivered prematurely and 21 fetuses (52.5%) died intra-uterine. Fetal mortality was 45%, of those 70% occurred in patients with AKI on top of preeclampsia. **Conclusion** Pregnancy related acute kidney injury represents a continuous burden in low-income countries. A global strategy should be implemented to reduce its incidence and its related adverse consequences on both mother and fetus. The paucity of data in this field reflects the importance of implementing further research studies to deeply understand the precipitating and key pathophysiologic mechanisms involved in this disease.

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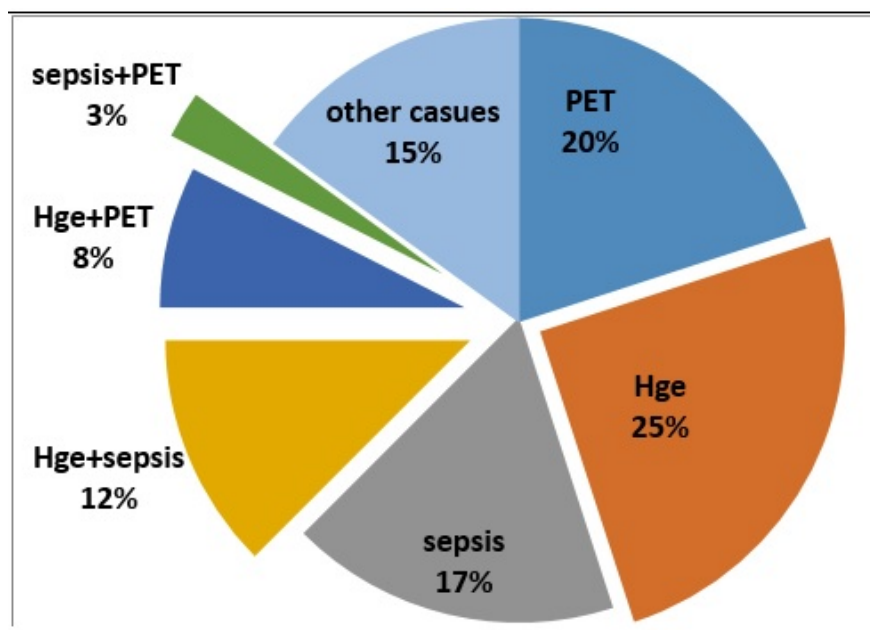


Figure 1: Sub-groups of PR-AKI according to the etiology