IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 16, Issue 8 Ver. XII (Aug. 2017), PP 97-98
www.iosrjournals.org

Acute Kidney Injury in Obstetrics- A Case Report.

[1*]Dr. Ramapraba.S [2]Dr.Saraswathi

[1]*Postgraduate, Department Of Obstetrics And Gynaecology, Sree Balaji Medical College And Hospital, Chrompet 44, Chennai, India.*
[2]*Head Of The Department, Department Of Obstetrics And Gynaecology, Sree Balaji Medical College And Hospital, Chrompet 44, Chennai, India.*
Corresponding Author's : Dr.S.Ramapraba

Abstract: Acute kidney injury (AKI) is a serious complication in pregnancy, resulting in significant maternal morbidity/mortality and fetal loss. Although the incidence of pregnancy-related acute kidney injury (PRAKI) has decreased in developed countries, it is still common in developing nations. This is a case report of PRAKI due to septic abortion which occurred after following all aseptic precautions. Timely identification of "at-risk" individuals and treatment of underlying conditions such as sepsis and preeclampsia remain the cornerstone of management. Proper counseling before selecting the patients for Assisted Reproduction Technology is very important for continuing pregnancy to prevent life threatening complications.

Keywords: PrAKI, sepsis, counseling.

Date of Submission: 2 -06-2017 Date of acceptance: 04-09-2017

I. Introduction

Acute kidney injury (**AKI**) is the abrupt loss of **kidney** function, resulting in the retention of urea and other nitrogenous waste products and in the dysregulation of extracellular volume and electrolytes. The incidence of acute kidney injury in pregnancy declined significantly over the second half of the 20th century; however, it is still associated with major maternal and perinatal morbidity and mortality. Septic abortion is the most common cause of pregnancy related acute kidney injury PRAKI. The incidence of AKI in pregnancy is declining in developing countries but still remains a major cause of maternal and fetal morbidity and mortality.

II. Case report

A 38 yrs nulliparous women presented in sree balaji medical college& hospital with complaints of fever and decreased urine output for 3 days.She had a history of spontaneous abortion@ 16 weeks of gestation 1 week back for which D&C was done which was preceeded by history of emergency cerclage done @15 weeks of gestation. She conceived with IVF treatment and was not on regular follow up. In the previous pregnancy conceived with IVF treatment after 15 yrs of marriage. Spontaneous preterm delivery occured at 28 weeks of gestation.(?cervical incompetence).Baby died at the same day of birth in view of preterm delivery. No other antenatal and post natal complications. No other significant history. On admission patient was severely Anemic,Icteric temperature was 101◦F. other vital parameters were normal. On Per vaginal examination Uterus was 8 weeks size, os closed, mild tenderness was present. Patient admitted in OBG ward. Appropriate investigations sent. Treated with IV antibiotics, antacids, antipyretics. Vitals monitored.USG showed endometrial thickness 1.8cm. No retained products of conception. Investigations : **Hb-6.9g/dl**:**Peripheral smear: microcytic hypochromic with anisopoikilocytosis :Platelet-58,000cells/mm FBS-62 PPBS-68Urine R/E: Protein:++Sugar :trace Pus cells:8-10Epi cells:6-7Bile saltsBile pigments: trace.** Fever profile:MP&MF: NegativeLeptospirosis :NegativeDengue NS1:Negative Renal function test:**Urea:166 Creatinine:6.8** Na:127 K:3.5 Cl:103 serology HIV: Negative HbsAg: Negative RPR: Negative Anti HCV: Negative. Liver function test: **Total bil:3.9 Direct bil:3.3 Indirect bil:0.6** SGOT:55 SGPT:25 Alk.Phos:79 Total protein:4.4Alb :2.9Globulin:1.5A:G:1:5 GGTP:31 **LDH:302.** Coagulation profile:PT(T)-15.8(C)-12INR-1.34PTT(T)-40.3(C)-30.3Fibrinogen-153D-dimer:8.11. Diagnosed as Sepsis with Multi Organ Dysfunction Syndrome; Acute Kidney Injury; Acute Liver Injury;Severe Anemia. One packed cell transfusion done. Patient shifted to ICU. IV antibiotics continued. Suggested urine c/s, Uric acid, I/O chart. Planned for dialysis. Four sessions of Hemodialysis done .Urine c/s: Enterococcus 10×5 grown in culture. High vaginal swab: E.Coli grown.Treated with IV Antibiotics-Daptomycin, Piptaz given.Echo : normal .General condition of patient was improved, creatinine level gradually declining below 3mg/dl , patient was discharged from hospital & advised to come for follow up.Plan : RFT every 4 weeks. Rheumatology evaluation: APLA,ANA. Hepatitis B vaccination.

III. Discussion

The frequency distribution of pregnancy related AKI is bimodal in relation to period of gestation. The first peak is seen between 7-16 weeks, mainly due to septic abortion, while toxemia of pregnancy, haemorrhage and puerperal sepsis account for 2nd peak between 34-36week. In this case rescue cerclage was done. The cause for sepsis may be due to pre existing infection due to cervical incompetence and associated UTI. Post operatively also patient did not receive proper care due to social causes. This could have been prevented by proper counseling before going for ART. Improper postoperative care could have been the root cause for developing sepsis and the other life threatening complications. While assisted reproductive technology (ART), including in vitro fertilization has given hope to millions of couples suffering from infertility, it has also introduced countless ethical, legal, and social challenges. Certified counselors if not the treating obstetrician should counsel the couple as well as the family members for continuing the pregnancy in a positive environment.This is a case of elderly mother conceived with IVF pregnancy ,but being non compliant due to social cause after cervical cerclage and improper post operative care resulted in sepsis & life threatening complications.

IV. Conclusion

Even in the modern era of antibiotics with all the aseptic precautions life threatening complications like pregnancy related acute kidney injury can occur. One should anticipate such complications as Timely identification of at-risk individuals and treatment of underlying conditions such as sepsis and preeclampsia remain the cornerstone of management. Pre conceptional counseling plays a vital role in preventing life threatening complications.

Reference

[1]. Manisha Sahay (2012). Acute Kidney Injury in Pregnancy, Basic Nephrology and Acute Kidney Injury, Prof. Manisha Sahay (Ed.), ISBN: 978-953-51-0139-0, InTech,

[2]. Beaufils MB, Pregnancy In: Davids on AM, Cameron JS, Gunfeld JP, et al, editors Clinical Nephrology 3rd ed. New York: Oxford University Press; 2005, P 1704- 28

[3]. Goplani KR, Shah PR, Gera DN, Gumber M, Dabhi M, Feroz A, *et al*. Pregnancy-related acute renal failure: A single-center experience. Indian J Nephrol 2008;18:17-21.

[4]. **Williams Obstetrics, 24e** F. Gary Cunningham, MD, Kenneth J. Leveno, MD, Steven L. Bloom, MD, Catherine Y. Spong, MD, Jodi S. Dashe, MD, Barbara L. Hoffman, MD, Brian M. Casey, MD, Jeanne S. Sheffield, MD

*Dr. Ramapraba.S . "Acute Kidney Injury in Obstetrics- A Case Report." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 16.8 (2017): 97-98.