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CASE REPORT

Pregnant Women Presented with Acute Kidney Injury: A Case Report

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Abstract

Acute Renal Failure is most challenging clinical problem when it occurs during pregnancy. Septic abortion is the most common cause of PRAKI in developing countries but its worldwide incidence has declined significantly. Sometimes septic abortion complicated by multiorgan failure. This 35 yrs multiparous lady having history of induced abortion, presented with multiorgan dysfunction. The patient was successfully treated and discharged with total care.

Keywords: Acute Renal Failure; acute kidney injury; AKI; pregnant women

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Introduction

The incidence of AKI has sharply declined from 0.5 per 1000 pregnancies to 1 in 20,000 births in developed countries.[1] On the other hand, pregnancy is still responsible for 15-20% of AKI in developing countries.[2] Unsafe abortion, abortion characterized by lack or inadequate skills of health care providers, hazardous techniques and unsanitary facilities is one of neglected health problems in developing countries.[3] Morbidity and mortalities from septic abortion are widespread in countries where abortion is illegal or inaccessible.[4] In this case report we describe a 35 years old woman presented with fever, yellow coloration of eyes & scanty urination following induced abortion

Case Presentation

A 35 years multipara patient admitted in Shaheed Suhrawardy Medical College Hospital on 28.2.12 with the complaints of termination of pregnancy by introducing stick by herself at her 6 wks of gestation 15 days back & fever , yellow colouration of eyes & scanty urination for 13 days. According to statement of patient following inducing stick pervaginally, there was excessive P/V bleeding. After passage of fleshy mass, pain and bleeding gradually remitted. Two days following stick insertion, she developed continuous high fever with chills and rigor, vomiting and blood stained diarrhea, 3-4 times /day and admitted in a Upazilla Health Complex but she concealed her history of induction of abortion. Gradually she noticed red scanty red urine, generalized swelling, jaundice, tachypnea, drowsiness and lethargy. Then she referred to tertiary hospital. There, she was thoroughly investigated, treated conservatively and diagnosed as jaundice with renal failure. Regarding investigations, at Barisal Medical College Hospital, her Hb% was 5.1 gm/dl , bilirubin was 8.9 mg/dl, SGPT 271 IU/L, prothrombin time was 91IU/L, S. creatinine was 152 mg/dl, S. electrolyte was Na 108 mmol/L, K 4.7 mmol/L, cl 68 mmol/L, High Vaginal Swab revealed no growth. USG showed incomplete abortion and bilateral Acute Parenchymal disease. For better management she was referred to National Institute of Kidney Disease (NIKDU). After admission she disclosed H/O induced abortion & was diagnosed as a case of

septic incomplete abortion with Acute Kidney Injury (AKI). Patient was treated with general treatment, fluid and salt restriction, packed cell transfusion & antibiotics. Dialysis was done on three successive sessions. Following dialysis her creatinine came down to 5.4 mg/dl, S. billirubin 1.1mg/dl, SGPT 53u/L, Prothrombin time 13sec, Serum Electrolyte was corrected, patient was referred to Shaheed Suhrawardy Medical College Hospital. On admission patient was severely anaemic, temperature was 101◦F, eadema was mild, other vital parameters were normal. On P/V exam. Uterus was 8 weeks size, fornics are free, os parous, P/V bleeding slight. Evacuation and curratage of uterus was done under spinal anesthesia. Then patient again transferred to NIKDU for subsequent management. Following evacuation again creatinine level was raised to 7.1 mmol/dl. Subsequently dialysis was done consecutively four sessions. When general condition of patient was improved, creatinine level gradually declining below 5mg/dl , patient was discharged from hospital & advised to come for follow up. After one month creatinine level came down to absolutely normal level.

Discussion

The frequency distribution of pregnancy related AKI is bimodal in relation to period of gestation.[5] 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.[1] Now the incidence of pregnancy related ARF is 1:2000 to 1:5000.[6,7]

Most women indulging in unsafe abortion in developing country were multiparous and did not want any more children as this case which is contrary to western literature where in most cases are unmarried primigravida of <25years age.[8]

In a study around 35% of patient developed septic abortion following unsafe abortion. Among them 2.5% patient developed renal failure. Most common method of termination was instrumentation(68%) followed by medication given and stick inserted vaginally and medications including herbal products given orally.[9] This patient gave history of introducing stick by herself which seemed to be very much unusual & presented with common presenting symptoms of septic abortion except foul smelling purulent vaginal discharge which is commonest presentation of septic abortion. Multi-organ failure was defined as failure of two or more organs. Organ failure in critically ill patient is associated with increased mortality. Acute Renal Failure was the most common organ failure. Acute etiology of renal failure was probably due to acute tubular necrosis. This patient had renal and hepatic failure but fortunately patient was recovered by seven times dialysis. However, a study in Pakistan reported that, the incidence of pregnancy related AKI is much higher and 50% of their patient did not show any recovery in renal function.

Conclusion

The tragedy of septic induced abortion is totally preventable. [10] It only needs definitive commitment to women's health. The need of the day is prevention, mainly by providing effective contraception and safe abortion. Prompt diagnosis of any complications and their effective treatment at tertiary hospital would avoid serious consequences.

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