Issue 1
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# arakh Newsletter

# **Editorial**

Dear All,

Parakh Hospital has always been involved in imparting knowledge to doctors. With this in mind a CME was arranged on 9th October, 2011 at IVY Restaurant Banquet Hall. We have received an extremely positive feedback from all the attending doctors and in continuation with the knowledge series we are launching PARAKH NEWSLETTER from December 2011. Through this newsletter we hope that our association with the doctors would not only be maintained but will also increase manifold.

We would like to bring a new topic in every issue so that we can present to the doctors news in the field of medicine and also showcase special cases. We hope that you find the article interesting and informative. Incase of any suggestions please feel free to write on info@parakhhospital.com

There is also a short quiz at the end of the newsletter which can be answered on the same email address. The winners will receive a small token of appreciation from team Parakh.

## 2 Interesting Cases of Acute Renal Failure

### **Cases:**

Case 1: 34 years old male patient was transferred here from a major institute as case of acute renal failure following septicemia and acute gastroenteritis. He was brought to us with anuria, grade IV dyspnoea (orthopnoea), severe metabolic acidosis and fever. He was hospitalized. We gave aggressive treatment and managed him in economy class. He was given higher antibiotics, acidosis was corrected and he was taken for dialysis. Close watch was kept on his fluid balance. After initial couple of days gradually patient started opening out and passing some urine which gradually increased. He was getting support of dialysis which was withdrawn at a later stage. Patient was discharged at serum creatinine 2.0 mg% and further recovery continued at home and follow-ups were done on OPD basis.

Case 2: 70 year old male patient was brought to us in a critical state from a nearby hospital. The patient was totally anuric, highly toxic, febrile, having tachycardia with severe metabolic acidosis. The patient had significant anemia, very high WBC counts and high azotemia. There was a history of habit of pain killer consumption. He was started on higher antibiotics, metabolic acidosis was corrected and other treatment started along with haemodialysis. Patient's septicemia took a long time to come under control and needed dialysis support for 3 weeks before he started opening out. Initial aggressive approach gradually paid off and the patient started getting stabilized, but still oliguric and required dialysis support. In view of this, he was prepared for kidney biopsy and which was s/o interstitial nephritis with severe ATN. In view of this, he was started with prednisolone. Patient started recovering and was discharged at serum cratinine 2.4 mg% which further improved and became normal on OPD basis.

### **Discussion:**

1st case was a young male patient having acute renal failure secondary to acute Gastroenteritis with Septicemia. The patient recovered following aggressive treatment and dialysis. The patient had acute tubular necrosis and in this case the recovery was faster as the patient was young and no pre-existing morbid factors were seen.

2nd case, 70 year old male patient with acute renal failure following Septicemia, with Hypertension and history of analgesic abuse and Ayurvedic preparation consumption. This patient took longer time to recover, needed kidney biopsy and also steroids were added for interstitial nephritis. The reasons for taking longer time to recover were:

- 1. Age
- 2. Past history of Hypertension

Page 2 PARAKH NEWSLETTER

- 3. Analgesic misuse
- 4. Consumption of Ayurvedic preparations
- 5. Severe Septicemia

All the above factors played a significant role in patho-physiology but at the same time understanding the same and tackling them properly helped in ultimate recovery.

# Review of Acute Renal Failure (ARF)/ Acute Kidney Injury (AKI):

ARF is now called as Acute Kidney Injury (AKI). This is one of the most rewarding illness to be treated by a Nephrologist as once it recovers, it recovers fully. Till date, even in the best of institutes, AKI's importance is not really recognized. It has been observed that an episode of AKI is present in nearly two-thirds of patients admitted to the ICU and the outcome of these patients will largely depend on how we manage the same. This will be a very complicated issue as depending on the level of azotemia and oliguria (urine output), various medications, fluid and electrolyte balance, ultimately the patient's recovery varies.

Following are the common risk factors for developing AKI:

- 1. Age
- 2. Pre-existing kidney diseases
- 3. Volume depletion/ dehydration
- 4. Diabetes mellitus
- 5. Hypertension
- 6. Sepsis
- 7. Drugs induced
- 8. Reduced effective arterial volume
- 9. Nephrotic syndrome
- 10. Congestive heart failure
- 11. Cirrhosis of liver
- 12. Trauma
- 13. Burns
- 14. Mechanical ventilation
- 15. Post-surgical site

Page 3 PARAKH NEWSLETTER

All the above can be grouped as:

- A. Pre-renal
- B. Renal
- C. Post renal

### **Predictors and Outcome:**

Various studies indicate that delayed Nephrological consultation is associated with increased mortality and morbidity regardless of whether dialysis is required or not. Usually mortality is highest in post surgical state. Also long term follow-up is very important especially for the risk in the development of hypertension and azotemia later in life.

### **Conclusion:**

Major progress has been made in understanding the molecular and patho-physiological mechanisms of ARF (AKI) with literature and rich fascinating new approaches to treat AKI. We hope that with advances and better long term management, better understanding of AKI will reduce mortality in such patients.

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### **JOKES**

The seven-year old girl told her mom,
 "A boy in my class asked me to play
 doctor."
 "Oh, dear," the mother nervously
 sighed. "What happened, honey?"
 "Nothing, he made me wait 45 minutes and then double-billed the insurance company.

### QUIZ

Which hormone causes the kidney to reabsorb water?

- A. Insulin
- B. Anidiuretic
- C. Somatotropic
- D. Thyroxin

### **HEALTH TIPS**

- 1. In order to live a happy life, you should start investing at an early age. Similarly, you should be health conscious at an early age and develop good habits.
- 2. A normal individual should drink about 2.5 liters of water everyday.
- 3. If you are a diabetic or hypertensive, be careful about your kidneys.
- 4. Mild azotemia also increases cardiac and cerebral events manifold.

Page 4 PARAKH NEWSLETTER