Summary & Conclusions
SUMMARY & CONCLUSIONS

The present study was done to study incidences of complication during hemodialysis, their treatment and outcome, in the dialysis unit of the Department of Medicine M.L.B. Medical College, Jhansi.

50 patient of renal failure out of 9050 patient admitted in medical, surgical and Obst & Gynae. wards in last one year (December 2000 - December 2001) were selected for the study.

All 50 patients were properly monitored during dialysis in terms of any complication during dialysis such as nausea, vomiting, muscle cramps, dialysis disequilibrium syndrome, fever, hypotension, hypertension, cardiac arrhythmias, hyperglycemia, hypoglycemia, itching, headache, chest pain or any bleeding disorders. Every complaint made by patient was properly attended, followed and treated.
Following conclusions were drawn from the study.

1. 28 (56%) patients had one or more complication during dialysis where as 22(44%) completed dialysis without any complications.

2. Hypotension was noted in 7(14%) patients undergoing dialysis.

   Possible causes of hypotension were

   - Use of acetate as dialysis solution.

   - High temperature of dialysis solution.

   - Patient taking antihypertensive medicine

   - Patient having any cardiac disease.

3. Hypertension was noted in 1(2%) patients

   Possible causes of hypertension

   - Pre-existing hypertension.

   - Removal of antihypertensive medication by hemodialysis.

   - Fluid overload.
4. Nausea was noted in 7(14%) and vomiting in 4(8%) patients.

   Possible causes of nausea and vomiting

   - Rapid hemodialysis causing DDS.
   - Hypotension contributed to nausea and vomiting.

5. Dialysis disequilibrium syndrome was noted in 2(4%) patients

   Possible causes were

   - Rapid hemodialysis
   - Malignant hypertension was risk factor for DDS.

6. Fever was noted in 3(6%) of patients

   Possible causes were

   - Reuse of dialyzer.
   - Contamination of dialysate.
7. 2(4%) patient had itching during hemodialysis possible cause
   - Heparin acted as allergen.
   - Formaldehyde use as sterilant also acted as allergen.

8. 1 (2%) was found to had irregular pulse (on ECG - Atrial fibrillation)
   - Coronary artery disease was possible cause of A.F.

9. 2 (4%) patient had muscle cramps
   - Hypotension might be the cause of muscle cramps.

10. Bleeding from operated site was noted in 1 (2%) of patient.
    Possible cause of bleeding
    - Heparin as anticoagulant.
11. 28 (56%) patients who had complication during hemodialysis required intervention for treatment.

All 28 patients successfully completed dialysis.

12. There was no mortality during dialysis.

This shows that because of ultrafiltration control, bio compatible membranes, more sophisticated machines, hemodialysis today is relatively safe but yet much work is needed to make hemodialysis truely complications free.