

INCREASED DIALYZER EFFICIENCY USING A DIALYSATE CONTAINING CITRIC ACID IN PLACE OF ACETIC ACID

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Hemodialysate

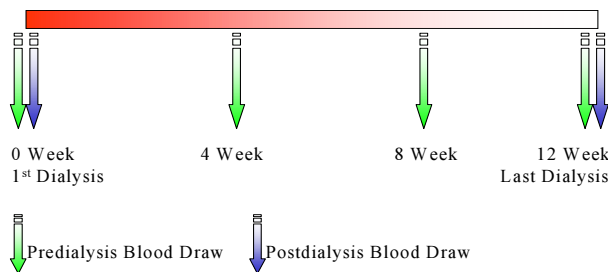
- Dialysate: Last Major Modification In 1970s – Bicarbonate Dialysate
- Bicarbonate Dialysate: Two Concentrates
 - Acid Concentrate – All Electrolytes
 - Bicarbonate Concentrate – Sodium Bicarbonate
- Acid Concentrate Contains Acidifying Agent To Control Dialysate pH

Acid Concentrate

- Current Acid Concentrate Contains **Acetic Acid** to Lower pH of Final Dialysate
- New Acid Concentrate (DRYalysate™) Contains **Citric Acid** As Acidifying Agent
- **Citric Acid** Allows Acid Concentrate To Be Dry Powder

Study Design

Twenty two stable hemodialysis patients used DRYalysate exclusively for 12 weeks.

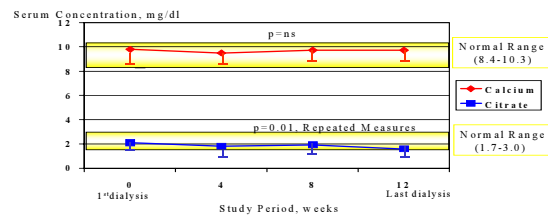


12-Week Study

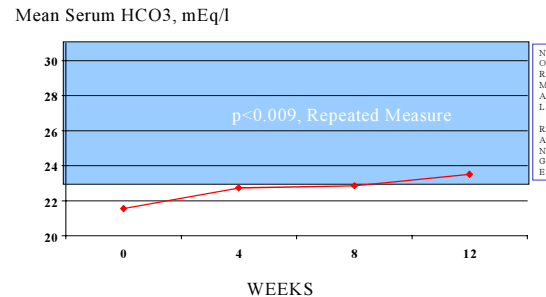
RESULTS

- DRYalysate Treatment Well Tolerated, No Unexpected Symptoms Observed
- No Bleeding Problems Observed, ACT In 4 Patients Checked & Unchanged From Usual
 - Staff Noted Increase In Number of Reuses
 - Several Positive Effects Noted

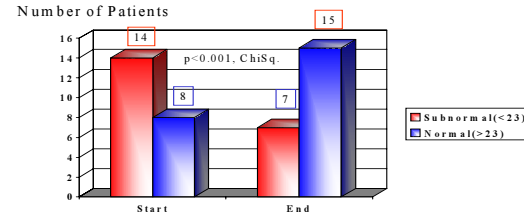
Predialysis Serum Calcium & Citrate Concentrations, mg/dl



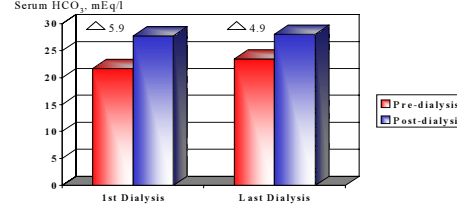
Predialysis Serum Bicarbonate



Predialysis Serum Bicarbonate

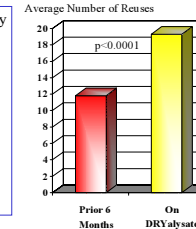


Pre- And Post-dialysis Serum Bicarbonate During The Study

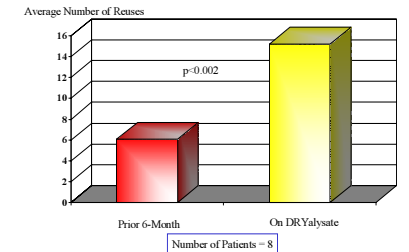


Dialyzer Reuse Comparison

Twenty patients exclusively used DRYalysate >3 months (starting with new dialyzers). Average dialyzer reuse during this period is compared to average reuse during previous 6 months on regular dialysate. (Maximum Reuse = 25)



Patients With <10 Reuse Before DRYalysate



Summary & Conclusion

- With DRYalysate Use:
 - No Decline in Serum Calcium was Noted
 - No Increase in Predialysis Serum Citrate Concentration was Observed
- DRYalysate Use Associated with Decreased Acidosis
- DRYalysate Use Increased Dose of Dialysis (Higher Kt/V, Lower BUN & Creatinine)
- DRYalysate Use Increased Dialyzer Reuse

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