

Management of Peritoneal Dialysis Post Ventral Hernia Repair with Mesh

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Introduction

Historically, hernia repair patients were required to transition to in-center hemodialysis for 4-6 weeks. This can be a burden for patients who need to work or do not want to transition to temporary hemodialysis.

In an effort to allow patients the option of staying on peritoneal dialysis post-operatively, the team created a plan which would allow for healing but no change in dialysis therapy.

Treatment Plan

- The treatment team consisted of a nephrologist, nephrology nurse, dietitian, and surgeon.
- The team met to discuss the concerns and to develop a plan for a chronic ambulatory peritoneal dialysis (CAPD) patient who was receiving 3 exchanges per day.
- The treating nephrologist discussed the plan with, and received approval from, the surgeon.
- The dietitian outlined a diet and fluid management plan, which primarily focused on lowering potassium and fluid intake.
- The treatment team reviewed symptoms of hypervolemia and contact information in the event that the patient had any adverse events.
- Patients that were known to be compliant with treatment and diet were selected for evaluation.
- Patients with known significant residual renal function were ultimately selected (Table 1).

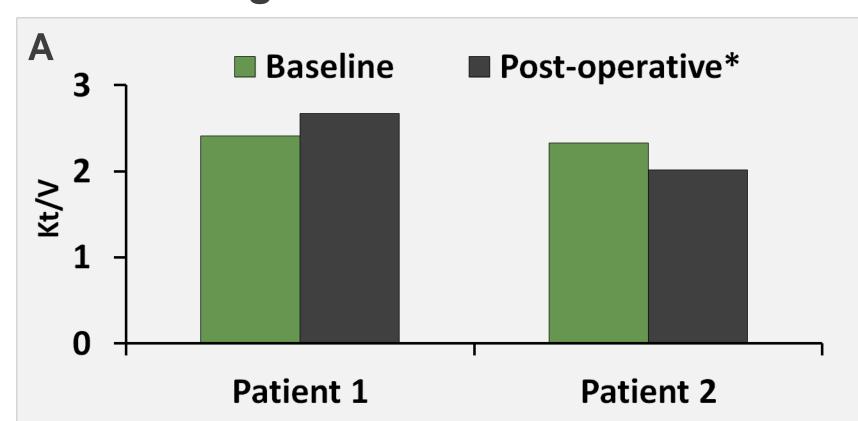
Results

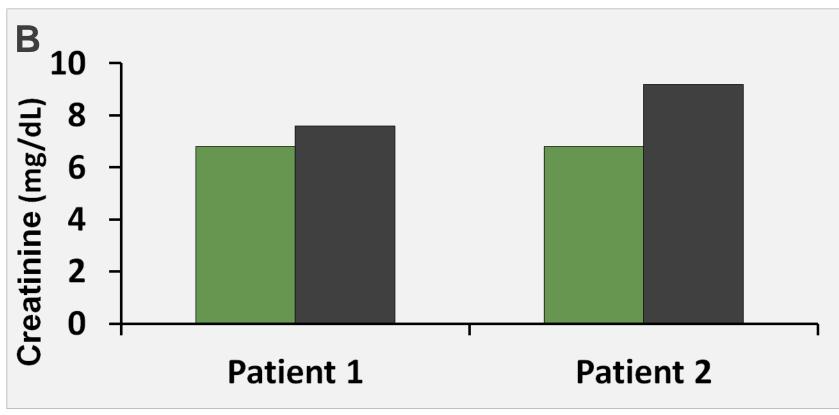
Table 1. Baseline Demographics

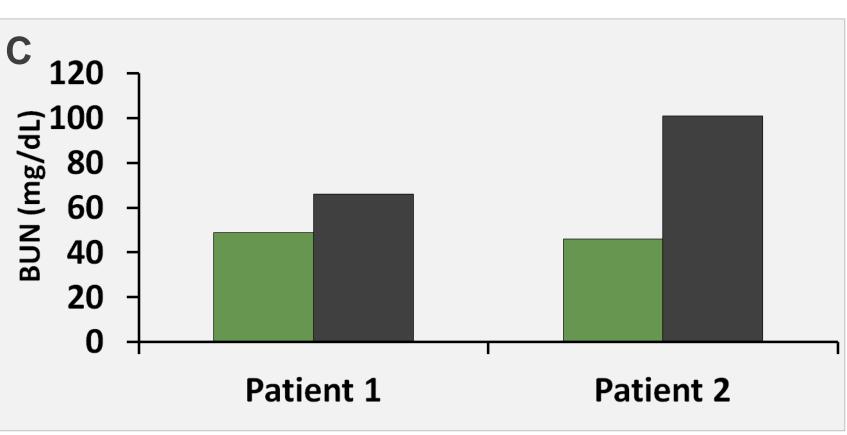
	Patient 1	Patient 2
Age (yr)	56	78
Gender	Female	Male
Race and Ethnicity	Caucasian	Caucasian
Diabetes	No	Yes
Vintage (months)	18	20
Body Mass Index (BMI)	29.67	25.68

- Dialysis was held for 4 days post-hernia repair, and the patient was started on torsemide 100 mg BID.
- On the 5th post-operative day CAPD was resumed with 1500 mL fill volumes and titrated up over a 2 week period.
- CAPD exchanges were then resumed with 1000 mL fill volumes TID with recommendations to remain supine as much as possible.
- Prescription and diet restrictions were continued for 2 weeks.
- The surgeon then gave permission to resume the full fill volume of 1500 mL.
- Patient change from baseline in creatinine, BUN, and Kt/V are shown in Figure 1.

Figure 1. Patient Kt/V, Creatinine, and BUN Change From Baseline







^{*}Patient 1: 3-weeks post-operative; Patient 2: 4 weeks post-operative.

Summary/Conclusions

- Patient compliance and residual renal function made the hernia repair successful without the need for hemodialysis.
- Patient 1 was such a success, that we have employed a similar plan with another patient that required a laparoscopic umbilical hernia repair.
- With these positive outcomes, we will continue to utilize this as our first option for future patients who require minor hernia repairs.
- Offering options to patients is important, and our team, including the surgeon, were willing to work together to develop a plan which worked for the patient.

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