Is Peritoneal Dialysis a Viable Treatment Option for Pregnancy and End Stage Renal Disease?

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On 3/27/17, T.T., a 35 year old African American female with hypertension and type 2 diabetes was admitted to the clinic for urgent start peritoneal dialysis. During her training, the patient reported symptoms indicating that she may be pregnant, the patient reported having missed her last 2 menstrual cycles and cramping. The physician ordered a pregnancy test on 4/17/17. The patient completed training on 4/18/17 and started CCPD on 4 exchanges of 2000cc with a last fill of 250cc of 2.5% solution over 8 hours 20 minutes. The patient went for an ultrasound on 5/01/17 that confirmed T.T. was 9 weeks 2 days pregnant. She was referred to a high risk OBGYN. The IDT discussed the risks of pregnancy and kidney failure with the patient. T.T. wanted to go forward with her pregnancy while continuing peritoneal dialysis even though hemodialysis was suggested by the high risk OBGYN. After review of research articles, the IDT agreed to continue with peritoneal dialysis based on patient’s lab values, fluid status and overall health of both the mother and fetus. The goal was to abide by the patient’s treatment option choice, keeping the patient on peritoneal dialysis as long as possible without risking either the patient or the fetus health.

Actions taken by the IDT to achieve the desire outcome included T.T. being seen weekly in the clinic for Hgb lab monitoring and administration of ESA as needed. On admission her Hgb was 8.4, this weekly contact allowed her to maintain an Hgb between 9.8 – 10.8. Ongoing daily support by phone was provided throughout her pregnancy by the IDT. On 6/27/17, the IDT met with T.T. to address noted issues with compliance; missing treatments and appointments at the clinic and stressed the risk this could cause to the pregnancy. After this meeting T.T. was more compliant with treatments and was able to reach her treatment outcome goals.

T.T. was brought into the Home Clinic on 8/31/17 to address fluid overload, rapid exchanges were preformed to remove excess fluid. At this time, T.T. stated she was stopping treatments early to allow time she needed to prepare her son and take him to the bus stop. The patient once again was educated about the importance of being 100% compliant with her peritoneal dialysis for her benefit as well as the fetus. Together the IDT and the patient came up with a solution that would allow for to complete her treatments as well as allow her to care for her son. This included educating T.T. how to safely disconnect from the cycler while in dwell and resume her treatment once she had completed her morning routine.

Throughout T.T. pregnancy, she was able to meet her Kt/V goal of 1.7, with a range of 1.77 to 1.95. Her residual kidney function ranged from 0.83 at the time she started peritoneal dialysis to 0.48 at the time she gave birth. Her peritoneal dialysis prescription was adjusted over her pregnancy to allow for comfort with the growth of the fetus, at the time of delivery her CCPD prescription was 6 exchanges of 1400cc over 11.5 hours, last fill of 1200cc.
On 10/16/17, T.T. gave birth to a 4lb 8oz baby boy, who was able to breathe on his own, without any additional live sustaining support. Both mother and baby were discharged home after only one week of postpartum care. T.T.’s son has reached his one year old birthday with normal growth and development, both mother and baby are doing well at this time.

This case demonstrations that with close monitoring and IDT support, that peritoneal dialysis can be a viable treatment option for some patients with chronic kidney disease and who are pregnancy.

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