Letters to Editor

Peritoneal equilibration test: A single center data from India

Sir,

There are more than 500 institutes, hospitals, or nursing homes in India, which offer and/or perform peritoneal dialysis (PD). Peritoneal equilibration test (PET)^[1] is an indirect method of evaluating the transport properties of the peritoneal membrane. There were only two reports^[2,3] of PET data from India. This is a report of PET data of PD patients from a government-run tertiary care center in south India.

Dialysis records of all 550 end-stage renal disease (ESRD) patients initiated on PD treatment between January 1998 and February 2012 have been reviewed retrospectively. All

patients were using a Dianeal PD solution (Baxter India Pvt Ltd, New Delhi). PET was performed between first and third month after initiation of PD. It was the standard PET performed according to the procedure described by Twardowski.^[1] It was performed by a PD coordinator.

Most of the 550 patients were males (458, 83.27%). The mean (\pm SD) age was 46.60 \pm 11.36 years. A follow-up period of more than 6 months was present in 388 patients (70.5%), and 3-6 months in 65 patients (11.8%). PET was performed between the first and third months after initiation of PD in 375 (68.1%) patients. The three main reasons for not performing PET in the rest were: (i) The patient was shifted to another institute after initiation of PD, (ii) the patient was not willing to undergo the test, and (iii) the patient had succumbed to ESRD before PET could be performed.

The frequency of each transport characteristic according to PET [Figure 1] was low average: 234 (60.71%) patients, high average: 101 (26.19%) patients, high: 32 (8.33%) patients, low: 18 (4.76%) patients.

PET was performed for the second time in 21 patients. In these patients, the second PET was performed as PD was reinitiated in them after peritonitis. The mean $(\pm SD)$ duration of PD before the catheter was removed for refractory peritonitis was 24.04 ± 15.86 months. PD was reinitiated in these patients in 60 ± 24 days after the removal of the catheter. In nine (42.87%) patients there was no change in transport characteristic. They were seven patients of low average, one each in patient of high and high average. In 10 patients, the peritoneal membrane transport characteristic changed from low average to high average, in one from low to high average

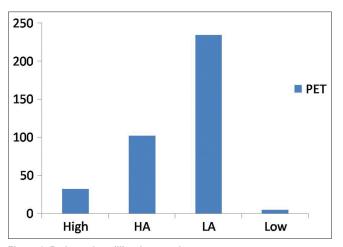


Figure 1: Peritoneal equilibration test data

and in another one it changed from high average to high.

The previous publications of PET data of PD patients in India differed in the results. In an older study,^[2] 41 PD patients were evaluated. The PET results revealed high transporters: 21 (51%), high-average transporters: 13 (32%), low-average transporters: 6 (15%), and low transporter: 1 (2%). In a recent study,^[3] the PET data of 178 patients was published. The results were, high transporters: 7 (3.93%), high-average transporters: 35 (19.66%), low-average transporters: 118 (66.29%), and low transporter: 18 (10.11%). The main reason for the variation in PET results of the three studies was sampling variability. The size of PD patient population appears to determine each type of peritoneal membrane transport characteristic. The other reason could be the duration between initiation of PD and performing the test. The other two studies^[2,3] did not mention when it was performed. Nevertheless, this report presents the PET data from an Indian center, which has a large population of PD patients with regular follow-up.

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