The Peritoneal Equilibration Test Should Be Included in Routine Monitoring of Peritoneal Dialysis Patients

KEY WORDS: Peritoneal equilibration test; encapsulating peritoneal sclerosis; patient monitoring.

Editor:

We read with great interest the Canadian guidelines and recommendations on peritoneal dialysis (PD) adequacy published in your journal (1). Canada has played a pioneering and pivotal role in the establishment of PD as a renal replacement therapy. Canadian colleagues have, since the early PD era, substantially contributed to the PD literature, and guidelines coming from the Canadian Society of Nephrology are highly appreciated and have a worldwide impact.

It is important to highlight that these recommendations, as well as all others related to PD, are evidence-based where such evidence exists (2). Unfortunately, randomized controlled trials in PD patients are limited. Therefore, many of the recommendations are based on case series or expert opinion. One opinion included in the Canadian guidelines states that routine monitoring of transport status is not necessary and that repeating the peritoneal equilibration test (PET) may be helpful when unexplained changes in volume status become evident (1).

Encapsulating peritoneal sclerosis (EPS) has been drawing the attention of the PD community as a devastating complication of PD with an incidence that rises with longer PD duration. Recently, much discussion has occurred about the possibility of terminating PD after 5 years to avoid this catastrophic situation (3). That opinion is supported by the current lack, despite ongoing research, of a reliable and widely accepted predictive method or index for the development of EPS. However, a few risk factors have been recognized, among which is the development of high transport status (especially occurring early in the course of PD) and deterioration of ultrafiltration capacity (4,5).

Although evaluation of membrane transport characteristics may not always be predictive for the development of EPS, an early increase in the dialysate-to-plasma ratio of creatinine could represent an early marker of EPS, and patients who develop such an increase should be followed closely for additional signs and symptoms of EPS. Assessment of membrane transport at least every 6 months has been suggested in the Japanese recommendations on the management of EPS (4).

On the other hand, since the increase in the use of automated PD and icodextrin-based solutions, high

transport status is no longer associated with poor clinical outcome. In this context, early identification of patients who develop characteristics of high peritoneal transport is crucial for implementation of the optimal PD regimen (6). The recommendation in the guidelines from the Japanese Society for Dialysis Therapy (7), in the guidelines for dialysis adequacy from CARI (Caring for Australians with Renal Impairment) (8), and in the Clinical Practice Guidelines for Peritoneal Dialysis from the UK Renal Association (9) for routine monitoring of membrane transport status every 6–12 months has been adopted by many PD units around the world, including ours. Routine performance of a PET does not substantially increase staff workload and is, in our opinion, a reliable, useful, and necessary tool for monitoring our patients and improving their management.

DISCLOSURES

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