EDITOR'S INTRODUCTION

THE COMPLICATED QUESTION OF PERITONEAL DIALYSIS TECHNIQUE SURVIVAL

In this issue of *Peritoneal Dialysis International* (PDI), a case report from Madrid describes a patient with insulin-dependent diabetes who has continued on peritoneal dialysis (PD) for more than 15 years (Monzón and Coronel). Unfortunately, such durability for the therapy is not commonplace; otherwise, this patient's experience would not be sufficiently noteworthy to constitute a case report. Technique failure in PD is a complex problem, with causes that vary from those that can potentially be influenced by quality improvement initiatives such as lowering peritonitis rates or managing ultrafiltration, to those that have their roots in the patient's environment. The latter include sociologic and economic factors whose solutions lie in the domain of public health. In this issue of PDI, risk factors for technique failure are explored in detail through a cohort study of 1587 adult incident US patients who commenced PD in 1996–1997 (Shen and colleagues from Stanford University). Importantly, socioeconomic factors are predictors of technique survival, and clearly those factors influence many other aspects of illness, including the likelihood of renal disease developing in the first place. This complex topic is eloquently examined by Rajnish Mehrotra in the accompanying commentary.

Of course, central to the concept of PD is that patients are trained to be independent, which sets the therapy apart from the generally passive patient experience of center-based hemodialysis. For years, the PD community has championed patient education, and it is noteworthy that the importance of greater patient involvement in long-term disease management is being increasingly recognized by many sources. For example, in England,

promoting and supporting self-care in the management of long-term conditions has become a core strategy for the National Health Service.

Exploring the mechanisms of PD is a key goal of the journal, and the present issue contains excellent examples of basic science work. They include a study of the ultrafiltration characteristics of glucose polymer fractions with low polydispersity (Leyboldt, Hoff, and colleagues), the effects of glucose degradation products in a model of mild peritoneal injury (Yokoi and colleagues from Kyoto), and the effect of vitamin D analogs to attenuate a model of peritoneal fibrosis (Hirose *et al.*, Nagasaki). It is through a better understanding of such processes that the goals of sustainability and durability for PD as a therapy will ultimately be realized.

An important paper in our series titled "PD in Developing Health Care Systems" is presented by a team led by Dr. R.M. Jindal from Bethesda, Maryland. It describes the establishment of a PD program in Guyana, South America, with a detailed review of costs, context, and outcomes. Complex logistics and training issues had to be surmounted to achieve this success. The PD program was established in that country in the context of a wider renal replacement therapy program comprising hemodialysis, vascular access services, and renal transplantation, financed through a private–public partnership. This program demonstrates the place that PD occupies in the creation of renal services for countries in which provision of such services is significantly underdeveloped.

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