FROM THE EDITORS

The ISPD Cardiovascular and Metabolic Guideline for Adults Treated with Peritoneal Dialysis

In this issue of *Peritoneal Dialysis International* we publish the International Society for Peritoneal Dialysis (ISPD) guideline relating to cardiovascular and metabolic complications of peritoneal dialysis (PD) in adults. The guideline is published in 2 parts, with the first paper (Wang AY *et al.* this issue) covering the assessment and management of cardiovascular risk factors, and the second (Wang AY *et al.* this issue) confined to the management of cardiovascular complications. The print versions present each guideline with a brief rationale, and the detailed supporting evidence is presented in the online supplements. The guideline working group of 12 authors, chaired by Angela Yee-Moon Wang, represents expertise from across our specialty and is to be congratulated on delivering a rigorous and detailed piece of work that will be of considerable value to clinical teams in their goal of providing optimal patient care. The introduction to the documents describes the process of study selection and acknowledges the problem that clinical evidence in our specialty is often not robust, or is lacking. The question then was whether to extrapolate evidence from chronic kidney disease or hemodialysis—and although there are concerns about taking that approach, it provides the only pragmatic solution. Thus for dyslipidemia or anemia, the recommendation is to use existing KDIGO guidance. Evidence was assimilated using the modified GRADE system that classifies both the strength of the recommendation (the balance of desirable and undesirable consequences, quality of evidence, economic considerations) and the level of evidence upon which it is based.

These guidelines have a broad prospectus since cardiac risk factors in PD patients go beyond the traditional to include residual renal function, volume control, inflammation, nutritional status and dialysate glucose exposure. Synthesizing the evidence to develop a recommendation was often challenging, for example when defining a blood pressure target. In this area, a registry study demonstrated differential risk associated with hypertension according to whether the patient was transplant listed or not (1); and an intervention study provided a mechanism of blood pressure control through salt and water restriction but at the expense of residual renal function (2). Volume management is couched in concerns regarding the overuse of the stronger dialysate glucose concentrations while being clearly conscious of the dangers of overhydration. The message relating to the impact of obesity on outcome in patients on PD is not consistent.

The articles conclude with research recommendations—and in this area there is much to do. Powering studies adequately is a challenge that many would regard as almost insurmountable, and our specialty is unlikely ever to compete with cardiology or diabetes for study size and evidence evolution. Our patient populations are heterogeneous, coming from a range of disease backgrounds, carrying a significant burden of co-morbidity, and even if the start of therapy is used as study entry, it does not present a level baseline. Furthermore, high dropout rates due to kidney transplantation or PD technique failure pose additional difficulties in conducting clinical trials that examine hard outcomes. Advancing the knowledge base requires strong collaboration and a detailed understanding of research methodology as well as a committed and motivated clinical community. As far as these latter points are concerned, we have considerable grounds for encouragement.

Martin Wilkie
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