FROM THE EDITORS

The Role of Peritoneal Dialysis in Saving Young Lives From Acute Kidney Injury

In this issue of *Peritoneal Dialysis International*, Mohamed Abdelraheem *et al.* from Soba University, Khartoum report a large single-center pediatric experience of acute kidney injury (AKI) in which 659 children were treated over a 7-year period. Seventy-two percent required dialysis, with peritoneal dialysis (PD) being used in the majority — the overall survival rate was 70.3%, with 58.1% recovering renal function. The authors cite the huge burden of death from malaria and diarrheal diseases in children worldwide, highlighting the importance of effective prevention and treatment of AKI since most cases, if managed effectively, will not require dialysis. The second experience is from Lagos, where Christopher Esezobor *et al.* describe using intercostal drains in the place of conventional PD catheters to treat 17 children, drawing attention to the challenges faced by clinicians when they cannot get access to basic health care resources. Blocked catheters and infection were common complications; however, despite these, 8 children recovered and were successfully discharged home.

The important place of PD to treat AKI in low health care resource settings is highlighted by both of these papers and discussed in detail by Fred Finkelstein *et al.* in an accompanying review in which they describe the Saving Young Lives project. Saving Young Lives aims to provide training and resources to initiate and, importantly, sustain AKI treatment programs in low-resource settings. It is supported by a charitable grant and managed cooperatively by four equal partners: International Society of Nephrology (ISN), the International Society of Peritoneal Dialysis (ISPD), the International Pediatric Nephrology Association (IPNA), and the Sustainable Kidney Care Foundation (SKCF). Saving Young Lives has already helped to develop programs in Tanzania, Benin, Cameroon and Ghana, with plans to initiate centers in Sub-Saharan Africa and South-East Asia.

When it comes to managing AKI using PD, it is clearly important that health care teams have robust clinical guidelines based on careful review of the existing

literature. The ISPD is proud to publish such a guideline in this issue of PDI, prepared by an international group of adult and pediatric nephrologists lead by Brett Cullis and Fred Finkelstein and based on close working with the ISN. Recommendations cover the indication, set-up and delivery of PD for adults and children presenting with AKI in a range of clinical circumstances, including the prevention and management of complications. Peritoneal dialysis is more likely to be used to treat AKI in countries with developing health care systems where it is more cost-effective than hemodialysis or hemofiltration and, indeed, existing studies suggest comparable outcomes. However, across the world, doctors often work in locations where health care resources are limited, adding a further challenge to the task of making recommendations. This led the guideline development group to adopt the pragmatic approach of both a “minimum” and an “optimum” standard where appropriate — but indicating that practitioners should always strive to achieve the latter. Areas for future research are summarized, including a call for better catheter design that would have reduced flow-related problems and is easier to place with minimal training. This AKI Guideline represents a major contribution to the specialty and the workgroup is to be congratulated.

The percutaneous placement of catheters has an important part to play in the emergency use of PD. One approach is for this to be performed by interventional radiologists, utilizing their considerable imaging experience (ultrasound and fluoroscopy) to ensure correct and safe placement. An excellent review by Abdel-Aal *et al.* in this issue presents a “Best Practices Consensus Protocol” for the radiological placement of PD catheters including step-by-step illustrations. Peritoneal dialysis also has an important part to play in renal replacement therapy for established renal failure in Africa and papers from Limpopo province (South Africa, Tamayo Isla *et al.*) and from Senegal (Niang *et al.*) report programs at different stages of development.

The work presented in this issue of PDI is core ISPD business — the place of PD in extending access to renal replacement therapy where and when it is needed. The ISPD was established by far-sighted individuals who saw the need to promote a therapy that has much to offer

patients worldwide. One of those pioneers was Dr Karl Nolph, an ISPD past president and founder member. He died in June, after a life in which he made a major contribution to renal medicine, inspiring colleagues and younger generations of nephrologists to see the important role of PD and to continue the work that he was so passionate about. We will be including reflections on his life in the September issue of PDI.

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