An in situ dialysis technique holds much hope for the future of patients with no kidney function. But the role of family practitioners in the use of the continuous ambulatory peritoneal dialysis technique (CAPD), is limited by its complexity. Like any other method of dialysis, CAPD necessitates the involvement of a knowledgeable team of physicians and nurses.

Ambulatory dialysis from a GP viewpoint

This is not to say that patients taught to use the method cannot enjoy a normal life with few of the problems associated with standard haemodialysis.

They can - and 60 patients in South Africa are successfully using CAPD with relative ease.

The family doctor of each of these patients is closely involved in general medical care, but matters directly related to the CAPD technique requires specialist involvement.

Co-innovator of the technique, Dr Jack Moncrief - Director of Nephrology Training, Co-Director, Haemodialysis and Transplant Unit, Brackenridge Hospital and Austin Diagnostic Clinic, Austin, Texas - was recently in South Africa as the guest of Sabax to demonstrate CAPD. During an exclusive interview with SA Family Practice, he explained where the general practitioner comes into the story.

"Firstly, the family physician can refer a patient with severe kidney disease for CAPD. At the moment, many patients are turned down and this has meant a fall-off in referrals. Knowledge of the criteria on which patient selection is based is thus of importance to the general practitioner," he said.

"Only patients who can be totally rehabilitated and who can return to normal full-time employment as a result of CAPD should be considered. Patients under 13 years and the elderly should be considered. Patients using the technique must learn to drain dialysis fluid from plastic bags into the abdomen via a cavity system of tubes. For the patient the process is relatively simple and needs repetition only four times a day, or thereabouts. The whole process is taught by specialists in hospital and replacement supplies of dialysis fluid or emergency extra tubing are given at regular return visits to the specialist.

The general practitioner involved acts as the go-between, seeing patients on routine matters and consulting the specialist on any incident that could possibly affect CAPD. Thus, the general practitioner must be well acquainted with the system but should nevertheless consult the specialist on all CAPD issues.

Normally the specialist concerned establishes a close working relationship with the patient's family doctor, the patient, and passes on basic information about the CAPD system. For example, in the event of the patient suffering from peritonitis - one of the major risks of dialysis - the GP can perform a variety of tests, including a white blood cell count, on the dialysis solution. Results of such tests can then be discussed with the specialist over the telephone and the GP can help in the decision as to whether a visit to the specialist is required.

The "what not to do's" are also important for the general practitioner to know, according to Dr Moncrief. A patient with kidney dysfunction is quickly poisoned by a variety of drugs. Knowing precisely which medicines are suitable for the CAPD patient presents a few problems and the best course of action in the event of a CAPD patient requiring medication is to seek the advice of the specialist.

As with any patient being treated with dialysis, there is a high incidence of anaemia. The haemoglobin level of the CAPD patient will naturally be low and on no account should the family doctor give a transfusion.

Finally, the family doctor should be aware of the limitations of the techniques. Although there are few dietary restrictions, the rule of anything extra tubing are given at regular return visits to the specialist.

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Any family doctor who feels that he is being left out of the picture regarding the care of his CAPD patient, can take solace from the fact that he is the expert when it comes to the psychological welfare of his patient.

Many patients find emotional and psychological changes accompanying their first use of the technique. The strict routine and essential cleanliness involved in the successful use of the method are sometimes difficult for the patient to accept. The increase in freedom and the change in the patient's lifestyle associated with CAPD may also affect the user, especially if he has been dependent on a dialysis machine in hospital.

The future of CAPD in this country will depend not only on an expansion in the training programme for special nurses and physicians, but also on the willingness of general practitioners to take a back seat role, which despite its lack of autonomy remains fundamental to the success of a dialysis technique with considerable potential.