Educating end-stage renal disease patients on dialysis modality selection: clinical advice from the European Renal Best Practice (ERBP) Advisory Board

Adrian Covic1, Bert Bammens2, Thierry Lobbedez3, Liviu Segall1, Olof Heimbürger4, Wim van Biesen5, Denis Fouqué6 and Raymond Vanholder5

1Nephrology Clinic, ‘Dr. C. I. Parhon’ University Hospital, Iasi, Romania, 2Department of Nephrology and Renal Transplantation, University Hospitals, Leuven, Belgium, 3Nephrology Department, CHU Clemenceau, Caen, France, 4Department of Clinical Science, Karolinska Institute, Stockholm, Sweden, 5Renal Division, University Hospital, Ghent, Belgium and 6Department of Nephrology, ‘E. Herriot’ Hospital, Lyon, France

Correspondence and offprint requests to: Liviu Segall; E-mail: l_segall@yahoo.com

Introduction

Creating and updating evidence-based guidelines in medicine are costly and time-consuming. For that reason, the nephrological community tried to build up a single set of international guidelines under the aegis of Kidney Disease Improving Global Outcomes (KDIGO) [1]. However, this international effort may not be correctly perceived by European nephrologists, who sometimes feel that differences in practice patterns make it difficult to apply guidelines developed outside Europe. On the other hand, the latest versions of the European Best Practice Guidelines (EBPG) may appear outdated in some respects, while not all aspects of nephrological practice are currently covered by KDIGO.

A specially appointed ERA–EDTA Work Group met in Paris to discuss a European guideline planning in early January 2008, and agreed that the Association should continue producing and updating guidelines in collaboration with KDIGO [2]. It also agreed that ERA–EDTA should issue suggestions for clinical practice in areas in which evidence is lacking or weak, which would be published as ‘clinical advice’ rather than ‘clinical guidelines’ [2].

With regard to peritoneal dialysis (PD), the ERBP Advisory Board recently decided not to create new or updated guidelines, as there was not enough new evidence to produce a meaningful change in scope from the previous guidance documents published in 2005 by EBPG [3]. Instead, it was felt that an advice on three important PD-related topics for everyday clinical use was needed: peritoneal membrane evaluation, modality selection and adequacy. The text on membrane evaluation is currently in press [4].

The present publication, issued by an ERBP Expert Group and approved by the ERBP Advisory Board, comprises the clinical advice on renal replacement therapy (RRT) modality selection for end-stage renal disease (ESRD) patients. The following text is an executive summary of these recommendations, whereas the complete text, including the rationale of the statements, is published in the current issue of NDT Plus [5].

This paper has been designed to provide information and assist decision making, but is not intended to define a standard of care or to improve an exclusive course of diagnosis, prevention or treatment. Individual decision making is essential in the approach to any disease. Variations in practice are inevitable when physicians take into account individual patient needs, available resources, and limitations specific for a geographic area, country, institution or type of practice. In addition, evidence may change over time as new information becomes available, so that practice may be modified subsequently.

Initial dialysis modality selection

Clinical advice

There is insufficient evidence to support a general preference of haemodialysis (HD) over PD, or vice versa, for medical reasons. Therefore, the initial modality choice should be made primarily by the well-informed patient.

(i) As a consequence, all RRT centres should try and provide, or support in collaboration with other centres, all available treatment options: PD (including CAPD and APD), HD (including home HD and nocturnal programmes) and transplantation (including cadaveric and non-cadaveric), to make sure that all patients can select the modality that is most suitable for them.

(ii) As a consequence, all patients and their families should receive well-balanced information about the different RRT modalities, by means of a structured education programme. This also applies to late-referred patients and those starting dialysis in an emergency situation,
who should receive the information once their conditions have stabilized.

Clinical advice
The following conditions should not be considered as contraindications to PD:

(i) Physical or mental inability to perform PD
(ii) Older age
(iii) Poor adherence/non-compliance to therapy
(iv) Obesity
(v) Congestive heart failure
(vi) Polycystic kidney disease
(vii) Diverticulosis
(viii) Abdominal hernias
(ix) Portal hypertension
(x) Liver transplantation

Choice between CAPD and APD

Clinical advice
There is as such no reason to prefer CAPD or APD, as long as the dwell time of the patient is matched to his/her peritoneal transport type. As outcomes on both modalities have been found to be equal, choice should be guided by patient preference.

Transition between modalities

Transition from HD to PD
Clinical advice. Patients on HD should be informed about the option of PD when they suffer from any of the following clinical conditions:

(i) Intradiagnostic haemodynamic intolerance and muscle cramps despite optimal adjustment of dry weight
(ii) Problems to create a well-functioning native vascular access
(iii) Intractable or recurrent ascites

Transition from PD to HD
Clinical advice. Patients on PD should be informed about the option of HD when they suffer from any of the following clinical conditions:

(i) Incapacity to maintain fluid balance
(ii) Relapsing or persistent peritonitis
(iii) Incapacity to control uraemic symptoms or to maintain a good nutritional state
(iv) Changes in lifestyle circumstances
(v) Declining residual renal function
(vi) Intra-abdominal surgery
(vii) Sclerosing peritonitis

Choice of dialysis modality for patients with failed renal transplantation

Clinical advice. In patients with failed renal transplantation who return to dialysis, there is no proven difference in survival between HD and PD. Therefore, the choice of dialysis modality for these patients should be based on the same principles as those applying to the initial modality choice.

Assisted PD

Assisted PD is a PD modality performed at the patient’s home with the help of a health-care technician, a community nurse, a family member or a partner. It is indicated for ESRD patients who choose PD as RRT modality or in whom HD is contraindicated, who have no contraindication to PD, but are incapable to perform PD exchanges by themselves, and whose family members’ quality of life could be affected by the burden of caregiving. This modality may be proposed either to incident dialysis patients or to previously self-care PD patients who have lost their autonomy. Even with the additional cost of the assistance, assisted PD is generally less expensive than in-centre HD. Peritonitis risk is similar in nurse-assisted and family-assisted CAPD patients [6].

Conclusion

All RRT centres should include both PD and HD in their programmes and provide ESRD patients with unbiased information, thus allowing them to freely choose between the two RRT modalities. The patient’s preference should be the leading criterion for modality selection, in both ‘de novo’ and failed renal transplantation cases. On the other hand, the availability of both modalities enables transition of patients from one modality to another, whenever particular clinical conditions occur. Assisted PD is an additional opportunity for non-autonomous patients to be treated with PD, as an alternative to in-centre HD.

The ERBP Expert Group believes that the clinical advice presented above could help expanding the use of PD in European countries, where it is currently underused. A higher flexibility of RRT programmes would allow patients to choose the dialysis modality they find most suitable for them. Also, a decrease of the burden of HD units and expenditure savings could be achieved.

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