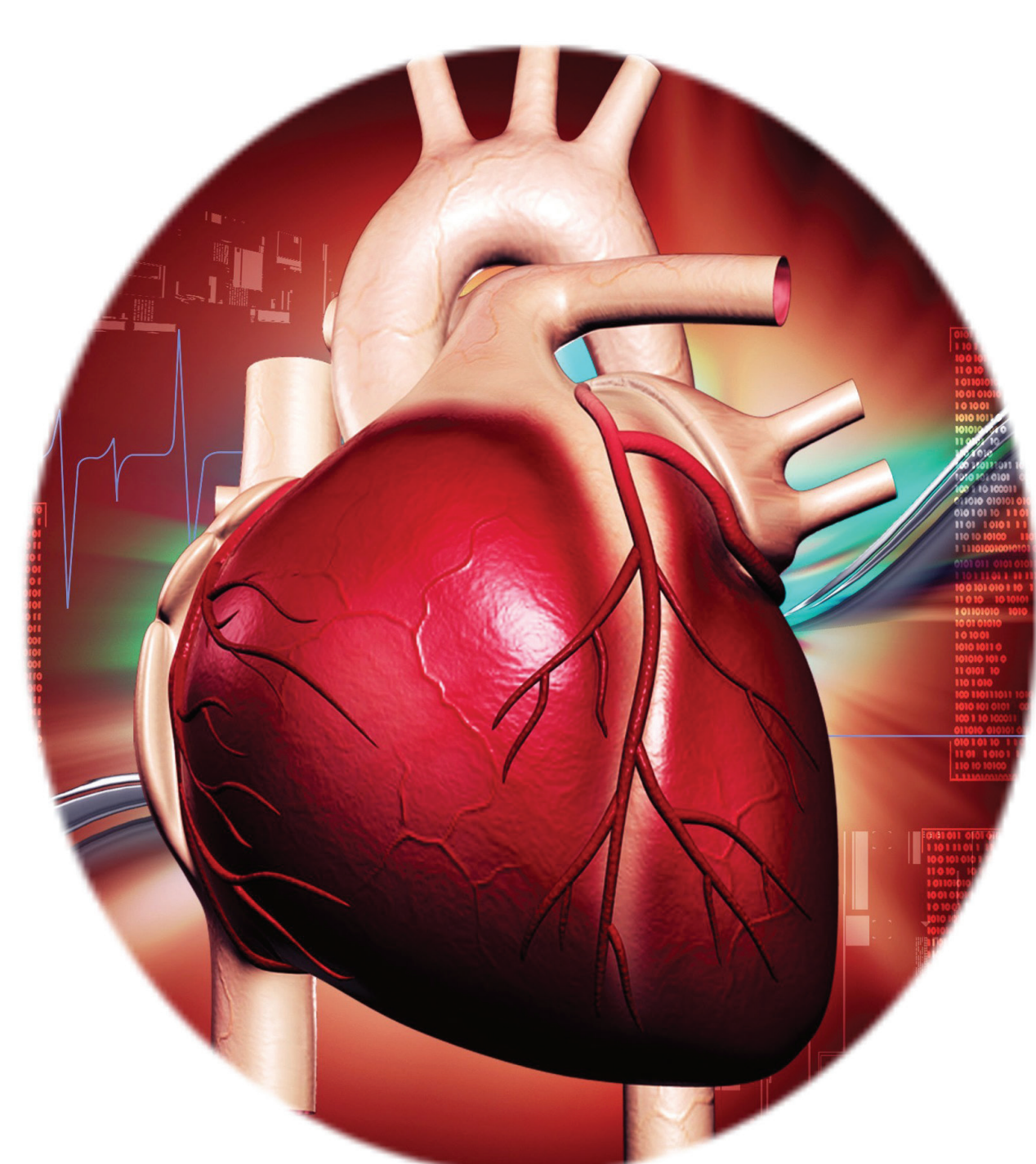




## The role of a PD nurse in light of two cases

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Currently, in our centre out of 22 patients in the case of 2 the launch of dialysis treatments were justified by oedema due to cardiac failure encumbered with kidney insufficiency on the first account, rather than kidney failure alone.



Professional, material and personal conditions are all prerequisites in order to achieve the objective of successful education by the PD team. On the part of the PD patient somatic and psychical aptitude, motivation and willingness of cooperation are required.

Education must always be individually-tailored, conscious, targeted, permanent, and must be based on multi-professionalism and mutual trust. Without these conditions no successful education can be effectuated.

Multiprofessionalism-based education encompasses activities exerted by nephrologists, PD nurses, practitioners, diabetologists, cardiologists and dietitian consultants acting in concert with social workers. At present, patient education is mainly carried out by PD nurses in our centre.

Education must be continuous. The first module of education should occur following choosing modality. Under the framework of intensive training basic information is passed on based on the educational syllabus. This is followed by a written as well as a practical exam. As the next step, the period of a continuous education sets in until the end of the PD programme, which is describable by a gradually increasing dedication to patient care. It requires an individual-based approach with regard to laboratory parameters and individual treatment implemented in conjunction with treating special problems including neopathy which may arise.

Education is to be regular, permanent and iterative while appraising and rectifying any potential insufficiency in the patient's knowledge coupled with endeavours to deepen it. The success of the education may be demonstrated by the incidence rate of neopathy.

The advantages of PD treatment independent of renal function are: continuous and gentle ablation of fluid and Na<sup>+</sup>, improved response concomitant upon diuretics, decreased ascital and intra-abdominal pressure, the functional state of the heart improves together with the ejection fraction of the left ventricular, better retained residual renal function, decreased demand for hospitalisation required by heart failure and better survival indices can be obtained.



### Mrs. J.A., 68-year-old female patient

Anamnesis: hypertension, struma nodosa, angina pect., diabetes mellitus ACBG on 3 occasions due to angiopathy re coronarography, reACBG due to graft obstruction, in 1999 strumectomy and ophthalmic surgery. In March 2003 hospital recruitment due to asthma cardiale, since then known pancreatitis and ambilateral renal cirrhosis justifying nephrological care. Oedema of cardiological origin prompted launching dialysis in 2004, the patient chose PD treatment. On 28 July 2004 implantation of Tenckhoff-catheter was implemented, since 27 August CAPD treatment 3xDianeal PD1 daily with 1,36%-solution. Due to incisional hernia incisional reconstruction and Tenckhoff-catheter replacement occurred. Since then the patient's abdominal dialysis has been performed by an automatic instrument (Dianeal PD4 10000 ml solution of 1,36%-strength for 8 hours).

In 2013 normal frequency atrial fibrillation absolute was diagnosed in her. Parallel to addition of LMWH p.o. cumarin has been administered to her. In 2013 following an unsuccessful electric cardioversion the patient bradycardised treated with amiodaron. Holter - monitoring performed after the abandonment of conduction-blocking drug sick sinus syndrome could be observed necessitating pacemaker implantation. In the course of the PD treatment lasting for nearly 10 years she has not had peritonitis.

Ideally, education is managed horizontally i.e. the patient is considered to be a partner, while the arbiter is the PD team.

The factors influencing individually-tailored education are as follows: patient's age, his/her educational background, motivation, way of life, notion pertaining to his/her disease and treatment, gender, ability to learn, social background, cultural habits and the scope of his/her knowledge as to the basics of sanitary.

Adequate transfer of information could facilitate the preparedness and cooperation of our patient; dialysis treatments will be efficacious and safe with less neopathy and better survival prospects.

The scope of the educational syllabus includes the underlying conditions, accompanying diseases and the therapy applied. Furthermore, it embraces the basics of both the theory and practice of peritoneal dialysis, of the symptoms of neopathy and its treatment (emphasising the dangers that it may pose), diet (K, P, nutrition, fluid intake) and calling the patient's attention to the significance of appropriate life-style with particular regard to the perils of smoking, obesity and exercise.

It is of paramount importance to us to be in contact with cardiologists so that they can possess adequate information concerning the PD treatment and its effects.

Viewed from the angle of the cardiologist, the number of heart patients with GFR dwindled and especially, mainly due to their timely reference, so did the number of those with cardiac failure whose reaction to diuretics was more demanding to elicit.

### BZ, 58-year old male patient

Anamnesis: hypertonia, diabetes mellitus, despite switched treatment of arrhythmia recurring atrial fibrillo-flutter, card. decomp., on 20 October 2008 electrophysiological examination followed by cavotricuspidal RF ablation due to typical isthmus-dependent flutter and carried out using simultaneous MVG technique. Besides Cordarone th. fibr. auric recurred on 27 October 2008. In November 2008 he was examined upon a series of collapse, in connection with flutter-sinus rhythm alternation and relay were observed followed by DDDR-type pacemaker implantation. Since spring 2008 he is in nephrological care due to known nephrosis syndrome, since March 2009 EPO-treatment has been carried out. In August 2009 hospitalisation due to atypical chest complaints (flutter auric. parox.). Azotaemia and gravis heart failure prompted suggestion of dialysis treatment upon which the patient opted for CAPD. On 28 June 2009 Tenckhoff-catheter implantation was done. Since 23 August 2009 CAPD treatment (Dianeal PD1 2000 ml 2.27%-1.36%-1.6%- 1.36%-solution) has been carried out. Current PD treatment is with Dianeal PD4 2000 ml 2.27%-2.27%-Extraneal solution. Presently his residual urine is: 2100 ml/day, GFR: 13ml/min.



Our team lacks a multidisciplinary team, since pre-dialysis PD patients are educated by a PD nurse, who earns the trust of the patients via which cooperation between the nurse and the patients becomes smooth. In the case of both patients grave cardiological and metabolic diseases were present besides renal failure. Their metabolism, due to diet, is constantly balanced. They are disciplined in terms of observing the regulations of the drug therapy. Thanks to education they do not neglect their cardiological controls either, thus their cardiological status and the conditions of their renal failure are balanced. In both patients following the commencement of dialysis their residual urine is retained, GFR decreased in one patient, while in the other it increased. For cardiological reason the requirement for hospitalization substantially decreased, thus the patients' quality of life has significantly improved.