American Association of Kidney Patients

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Is Home Dialysis An Option For You? Should It Be

When you started dialysis were you told about the option of treating yourself at home either with an artificial kidney or with peritoneal dialysis? A survey of more than 1,000 patients showed only about 12 percent were offered the option of home hemodialysis. Thirty-four percent of those surveyed were offered the option of peritoneal dialysis. As a result, as of December 2005, only 0.62 percent of U.S. dialysis patients were on home hemodialysis and 7.6 percent were treated by peritoneal dialysis. This, despite the fact that since 1973, Medicare regulations have required all patients be made aware of all treatment options including home hemodialysis and kidney transplantation.

Why should you consider home hemodialysis?
Simply put, it provides the best patient survival of any form of conventional three times a week dialysis, the best quality of life and opportunity for rehabilitation. It also offers the most independence and personal freedom, few transportation problems, least exposure to infections, freedom to schedule your own treatments and, most importantly, the opportunity to dialyze longer and/or more frequently.

Drawbacks are the space required for dialysis and the space to store supplies. Home hemodialysis patients may also need help from another person, some plumbing and electrical modifications in the home, and depending on the machine used, higher water and electricity bills. It is well known that adjustment and rehabilitation of patients with any chronic disease are improved by giving them a full explanation of their disease and its treatment, and as much responsibility for their own treatment as they can accept. Chronic kidney failure is no exception.

Who can do it? Almost anyone who is motivated, willing to learn, wishes to be independent, has suitable living accommodations and does not have frequent medical complications during dialysis. Our Seattle program at the Northwest Kidney Centers has shown patient intelligence is not a serious issue – of 100 patients we trained for home hemodialysis, the average IQ was 103 (normal is 100) with a range from 76 to 147. We also have data showing age, race and diabetes are not necessarily contraindications. Nine percent of our home hemodialysis patients are aged 80 or older, their racial profile matches that of all Washington state dialysis patients and almost 40 percent are diabetics.

It is simple to learn and do.
I tell patients that using a dialysis machine is no more difficult than using a car and you don't need to know details of the machinery, only how to use it safely. It has been around for 44 years and with appropriate training and support services, is just as safe, or safer than dialysis in a dialysis unit. Remember, you, the well-trained patient, are in charge of your own treatment. Help and advice from an experienced nurse is just a phone call away.

Is it for everybody? No, but experienced nephrologists believe at least 20 percent of all U.S. patients could do this if they had access to a program. At present, the figure is less than 1 percent. In Australia 9.4 percent and in New Zealand 15.6 percent of dialysis patients are on home hemodialysis.

What are patient concerns? Because they are not given satisfactory information about the options, most patients lose their independence soon after beginning treatment in a unit and come to believe they must be supervised by staff during dialysis. New patients are also scared of needle sticks and don't believe they or a helper could do this in the home. In fact, after training and gaining confidence, no one can stick better than patients themselves and blood

access lasts longer with self-needling. Also, those patients who are taught to dialyze themselves overnight have to overcome the fear of sleeping on dialysis, but with current equipment and safeguards this too is perfectly safe.

What about more intensive hemodialysis?
In the 1960s, most home hemodialysis patients treated themselves overnight three times a week, a total of 18 to 24 hours of dialysis a week. Compare that with today's hemodialysis in a unit where you get 12 hours a week if you are lucky. It has been known for more than 40 years that three times a week, 6 to 8 hours of dialysis, minimizes symptoms during dialysis and the feeling of being "washed out" afterwards. It has also been known, for almost as long, that dialyzing more frequently than three times a week is even better. It helps smooth out peaks and valleys in blood levels between treatments. Remember, normal kidneys work 24-hours each day, and the more often you dialyze, the more normal you will feel.

Sudden deaths in hemodialysis patients treated three times a week occur more frequently on Mondays after the two day gap than at any other time in the week. Even so, it is only in the last few years that much attention has been paid to frequency of dialysis. Short treatments, five or more times a week (short "daily" dialysis), improve or eliminate symptoms during or after dialysis, increase well-being and appetite, improve blood pressure control with fewer or no drugs, reduce hospitalizations and may increase patient survival. However, the best of all dialysis treatments, without any doubt, is overnight hemodialysis five or more times a week (long "nightly" dialysis) because this smoothes out changes in blood and fluid levels the most, usually eliminates the need for antihypertensive drugs and phosphate binders. It should also help reduce the risk of the joint symptoms that may develop after a number of years of dialysis. Obviously, more frequent dialysis requires more supplies, and so efforts are being made to have government recognize that savings from fewer and shorter hospital stays and fewer drugs more than make up for increased supply costs. Meanwhile, if your dialysis unit is concerned about the costs, a good compromise is overnight dialysis on alternate nights. New, more patient-friendly equipment for home hemodialysis is available or coming on the market. Home hemodialysis is at last on the rise again.

What should you do if you are interested in home hemodialysis but your unit doesn't provide this? Talk to your nephrologist about whether it is a suitable treatment for you. If so, ask for his or her help. If at all possible, meet with a patient who dialyzes at home and see what he or she has to say about its benefits. Ask the staff at your unit whether they can help you get home hemodialysis. If you are in one of the many units belonging to Fresenius or DaVita, you should be aware both companies provide this service. If your unit is not interested in helping you, contact your ESRD Network (the Forum of ESRD Networks Web address is www.esrdnetworks.org) and ask for information on the nearest unit that does provide this important treatment.

When you develop other chronic diseases you expect to have access to the best treatment available. For suitable dialysis patients who are willing to do it, home hemodialysis, and especially longer or more frequent hemodialysis is the best treatment.

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