An inquiry about the criteria of selection for dialysis was answered by 18 artificial kidney units of 9 European countries. Selection is made by the head of the group or his medical members.

There is no special fixed system for selection. In no one artificial kidney unit does there exist a committee which in cooperation with laymen selects the patients for dialysis. All units emphasize the dependence of indications on limited technical facilities. In order to extend the capacity peritoneal dialysis is used in some centres.

After analysis of the recorded criteria there is agreement on the following points:

1. Psychiatric stability and intelligence of the patients and ability for cooperation.
2. Sufficient accommodation at home, especially collaboration of the family, and advantageous traffic communications.
3. Absence of a second disease, which would impair general health.
4. No cardiovascular complications as a result of severe hypertension (cardiac insufficiency, coronary thrombosis, cerebrovascular accidents)
5. The lower age limit is 16-20 years and the upper limit 40-55 years. The majority of units fix the limits at 20 and 45 years.
6. Progressive urinary tract infections are contraindications in some units.
7. Some dialysis centres believe that the criteria for dialysis should be the same as for transplantation; other units have different criteria for these two forms of treatment.
8. Most of the units demand that the patients for chronic dialysis must be well-known to the clinic for some years, especially with regard to their character and their ability for cooperation.
9. The dialysis treatment should be started if conservative treatment, for example, diet or treatment of acidosis is unsuccessful and if progressive clinical signs of uraemia and a further reduction of diuresis are observed. The upper value of NPN is 150 mg/100 ml and of creatinine 10-15 mg/100 ml, respectively. A beginning neuropathy or pericarditis are also an indication for starting dialysis.

An important point is that no single sign, but always the clinical condition of the patient as a whole, should be decisive for indication.

In summary: agreement is to be found about the character and the psychological qualities of the patients to be dialysed. Different points of view are to be noticed with regard to the question of hypertension as a contraindication. There are also different opinions whether the criteria for chronic haemodialysis should be the same as for transplantation.

It must be stressed that every patient anywhere is an individual problem, especially if a previously unknown patient is transferred to a centre in a severely uraemic condition. Then it may be necessary to dialyse several times in order to evaluate his condition.

It seems to be necessary to extend the capacity of the artificial kidney units in order to enlarge in future the indications for chronic dialysis.
DISCUSSION

The Chairman: Thank you. Are there any questions? I think one of the big questions about selection is early selection. Dr. Scribner said that the patient should be taken rather early if one wants to get good results.

May I have some comments on this?

Scribner (Seattle): I certainly said that this morning and I shall just reemphasize it. If the goal of dialysis or transplantation is rehabilitation, early institution of therapy is much to be desired. It means that you are starting with a patient who is still well enough to work, and he carries right on through.

We have slowly but surely in our programmes got enough ahead of the game so that we are starting patients at what we consider as an ideal time, namely the time that they are beginning to lose time from work. Such patients do not go into the hospital at all, especially if they are going on a home programme, and start right out with their training as out patients.

With this approach, that we are beginning to be able to apply, we do not see the neuropathy, the weakness, the psychic problems that we saw in the earlier years when we were starting with moribund patients.

As to the overall question of selection, it still worries me a great deal. I know that everyone can cite examples of patients who we thought were going to turn out badly and then turned out well, and vice-versa. And yet, in our fifty odd patients now, that have all been screened and projection made by the psychiatric research team as well that is working with us, their projection ability is really quite accurate, and our overall experience is that in a patient who has the motivation—and I put the stress on motivation—to want to accept the treatment and wants to be rehabilitated, wants to get on with his life, the treatment by and large works extremely well.

On the other hand, the poorly motivated patient causes the staff or his family wherever he is a great deal of trouble, including himself. And it is this kind of patient that is going to pose the greater problems for the future in my view.

The Chairman: Dr. Scribner, at what level of creatine clearance do you take your patients?

Scribner (Seattle): About the same as the others that were shown: serum creatinine from 15 to 25, creatinine clearance, I think the highest we ever took was 5 or 6 and the lowest 1.5. But it is more the well-being of the patient now that judges. If we have the facility for him, we tend to start him earlier than we otherwise would, and when you start them early, you can sometimes start with a once a week dialysis, which works fine. We have never started a patient so early we had to take him off, let us put it that way.

The Chairman: What about hypertension? Is it a contra-indication for you or not?

Scribner (Seattle): Only the vascular complications, as Dr. Dutz stressed. Hypertension per se has not been a contra-indication except if it has been of many years duration and in an older individual. If the patient has a lot of arteriosclerosis complicating his hypertension, it is very difficult to ultrafilter him. He has no range of blood pressure control. We have a man in his sixties who was a physician, who was a candidate for dialysis. We just could not handle his blood pressure problem at all because his vasculature was so rigid.

Shaldon (London): There was another point about early starting which is that if you have a
well organized unit expanding, you do not have the time or the staff to concentrate on bringing somebody back from the grave so that it is more economic to start earlier as well. Your whole programme can be totally disrupted if you have to fight day and night to save the life of patients who should have been taken up six months earlier. This may well be the determining factor in the smooth operation of large units.

The Chairman: As far as the question of the requirements for haemodialysis or transplantation is concerned, a question Dr. Dutz insisted upon, is there any answer?

Do you think that the same criteria of selection apply for patients to be transplanted or to be dialysed?

Merrill (Boston): One of the differences in the requirements is that the transplant patient have a suitable donor, which is not necessary for the chronic dialysis. But obviously the patient should be both sick enough so that there is no question of continuing him with any other form of therapy and well enough so that he will tolerate both of these procedures of which of course transplantation with the use of immunosuppressive therapy is certainly the more hazardous.