

period, with a count of almost 5,000,000 treatments. Here again, if we assume that 40% were on a coil type dialyzer, this would result in 2,000,000 treatments by this method, with a saving—just from the elimination of Cuprophane duty—of \$2.00 each or \$3,000,000 to the Federal Government.

The other 60% of treatments which are carried out with other type dialyzers in almost all cases utilize Cuprophane also, with costs ranging up to \$2.00 for the Cuprophane used in each treatment. Here again, if we assume that 3,000,000 dialyses were reduced by \$.42 each or a saving of \$1,260,000, again, just from the elimination of what we suspect the duty on Cuprophane to be. Therefore, it is my definite conclusion that this particular product, when imported for use in artificial kidneys, should have its duty eliminated completely. I believe this should be done just as soon as possible.

Respectfully submitted,

CHARLES P. JONES, *President.*

EMORY UNIVERSITY SCHOOL OF MEDICINE,
ATLANTA ARTIFICIAL KIDNEY CENTER,
Atlanta, Ga., May 22, 1968.

HON. BEN B. BLACKBURN,
Longworth House Office Building,
Washington, D.C.

DEAR CONGRESSMAN BLACKBURN: We appreciate your concern and your efforts and wish you prompt success in obtaining legislative action on the proposal to remove the tariff from cuprophane cellophane.

As we stated before, this cellophane product is imported from Germany for use as hemodialysis (artificial kidney) membrane. It is not used for any other purpose in America. American cellophane products are superior for wrapping packages. This membrane is used in approximately 75% of the hemodialysis treatment given in America. It is the only imported part commonly used for such treatment. The import duty on it is 23%. The supplier, Cobe Laboratories, Denver, Colorado, has written a promise to those of us concerned with this matter that the removal of the tariff will result in a saving to the patient of exactly the amount of the tariff.

The operating physical principal in the artificial kidney is that of osmosis. Osmosis applied to flowing solutions is called dialysis. When one of these solutions is blood, the process is called hemodialysis. In the artificial kidney an idealized solution called dialysate which contains the dissolved chemicals that the patient's blood should contain is passed on one side of a membrane (in this instance, cuprophane) and the blood is passed on the other. The abnormal products from the blood will pass, by osmosis, through the membrane into the dialysate and be discarded. By this means the metabolic poisons and impurities may be removed from a patient's blood. If this is accomplished twice weekly, the patient may be rehabilitated to productive life.

There are currently in the United States an estimated 2000 patients on hemodialysis. The number cannot be established with great certainty, but should be at least this many. The report of the Gottschalk Committee to the Bureau of the Budget estimates there are from 5000 to 7000 people per year who require replacement of kidney function in order to live. Obviously, most of these people are not receiving it. Future expansion of the capability to treat kidney failure will require a greatly increased use of hemodialysis.

In the Kluge dialyzer which we use at the Atlanta Artificial Kidney Center, there are 34 sheets of cuprophane. It usually requires from 36 to 40 sheets to build the dialyzer each time. Some sheets are defective and some may be damaged in assembling and have to be discarded. 36 sheets of cuprophane cost \$1.44. If this could be reduced by approximately one-fourth, this would be a saving of 30 to 35 cents to the patient. This saving would be accomplished with each treatment and twice weekly treatment would be necessary; thus, in the course of a year it would save a patient on maintenance hemodialysis approximately \$36.00. This is not a large saving, but every small economy over a long period of time is critical to these people. As a matter of principle, it is unconscionable to uselessly add cost to a product which is required only for the medical care of people who would die without it.

In this particular Center we accomplish between 1400 and 2000 dialyses per year. It would reduce our cost significantly. We will appreciate anything you