

the past 16 years I have been active in the direction of the diabetes clinic at Cleveland Metropolitan General Hospital. Prior to 1959, when I joined the full-time faculty of Case Western Reserve University at Cleveland Metropolitan General Hospital I had been engaged in the practice of internal medicine for 18 years in a suburban area of Cleveland. My practice dealt chiefly with patients who suffered from cardiovascular disease and/or diabetes mellitus. During the years of practice I served as a part-time teacher at Case Western Reserve University at Cleveland Metropolitan General Hospital.

The diabetes clinic at Cleveland Metropolitan General Hospital provides care to approximately 500 patients with diabetes mellitus per year. This totals approximately 2,000 patient visits per year. Approximately 80 percent of the patients have the maturity onset form of the disease. Prior to 1973, the majority of this group of patients were treated with oral hypoglycemic agents with a limited degree of success. Although dietary instruction was provided for the patients, there was little compliance.

When the results of the UGDP study were issued in 1970, we became concerned with our use of the oral hypoglycemic agents. We urged the physicians who cared for patients with diabetes in the clinic and hospital to pay heed to the results of the above study and to reevaluate their treatment of the maturity onset group of patients. In an attempt to learn the extent of the use of oral hypoglycemic agents and their cost, the amounts of these medications dispensed by our staff were recorded from 1968 to early 1972, and I would refer you to table I. Review of these data disclosed an alarming increase in the use of these agents from 1968 through 1970. Response to the recommendations of the UGDP study was reflected by a modest decrease in the use of the oral agents during 1971 and 1972. Because we believed that the use of these agents was still excessive, the following letter was dispatched to the chairman, pharmacy committee of the hospital on May 24, 1973.

The results of the University Group Diabetes Program, UGDP, Diabetes, 19, Supplement 2, 747-830, 1970, allows one to develop the following conclusions concerning the safety and effectiveness of the oral hypoglycemic drugs, specifically the sulfonylurea group, Tolbutamide and Chlorpropamide. (1) In the group treated with Tolbutamide there was a significant increase in deaths from cardiovascular disease, as compared with those treated with either insulin or strict adherence to a calculated diet. (2) That Tolbutamide was not as effective as either insulin or strict adherence to an isocaloric diet in the control of levels of blood sugar.

The UGDP study subsequently reported comparable results with the use of Phenformin, J.A.M.A., 217 No. 777-784, 1971.

It is only fair to point out that there are skeptics who do not accept the results of the above study.

I accept the results of the study and believe that the use of Sulfonylureas, Tolbutamide and Chlorpropamide, and the Biguanides, Phenformin, should be restricted because they appear to be hazardous to health and are far less effective and more expensive than insulin.

I suggest that we implement a form of control which would restrict the use of Sulfonylurea drugs, Tolbutamide and Chlorpropamide, and Phenformin with the following exceptions:

One, patients who cannot administer insulin to themselves because of severe visual impairment or other physical handicaps such as neurologic disorders which impair use of arms and hands.

Two, patients who refuse to use insulin.