THE TREATMENT OF SUBACUTE GLOMERULONEPHRITIS
BY HAEMODIALYSIS

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In the Department of Medicine of the University Hospital of Göttingen 23 patients (19 male, 4 female) with subacute glomerulonephritis were treated in the last 5 years. Most of the patients were aged 15–30 years; the oldest patient with histologically proven subacute glomerulonephritis was 60 years of age.

Clinical features
Oliguria and a rise in blood urea occurred very early. Other early signs were haematuria, massive albuminuria and moderate hypertension. The other typical features of nephritis were inconstant at the beginning of the disease and usually became manifest as it progressed. Figure 1 shows schematically the typical development of subacute glomerulonephritis based on an analysis of our 23 cases. It is remarkable that in every case there was an increased excretion of leucin-amino-peptidase in the urine.

![Graph showing typical clinical course in subacute glomerulonephritis.]

Fig. 1. Typical clinical course in subacute glomerulonephritis.

Treatment
Since the aetiology of the disease is unknown there is no specific treatment, and the measures we employed were disappointing.

(a) Corticosteroids
On the basis of Sarre's favourable results in animals, 6 patients were treated with corticosteroids. No prolongation of survival was noted.
(b) Penicillin
Ten patients received penicillin without any benefit.

(c) Haemodialysis
Thirteen patients were treated by haemodialysis, receiving a total of 48 dialyses. In 5 patients an arterio-venous Scribner-Quinton shunt was inserted in the forearm. There was a higher incidence of thrombosis and infection of shunts than in patients with acute renal failure or chronic nephritis with similar prostheses. During 11 patient months we had to declot and replace shunts 9 times. Before we adopted the Scribner-Quinton shunt 8 patients died after all vessels suitable for cannulation had been exhausted.

The effect of haemodialysis on survival is shown in Figure 2. The 13 patients treated by dialysis had a mean survival of only 3 months; they did not live longer than those who were treated conservatively.

![Graph showing survival time in months of 23 patients with subacute glomerulonephritis. Crossed O = patient treated by dialysis. x = patient treated conservatively.]

Fig. 2. Survival time in months of 23 patients with subacute glomerulonephritis. Crossed O = patient treated by dialysis. x = patient treated conservatively.

The 5 patients with A-V shunts died although their BUN's were kept below 130 mg% and fluid retention was prevented. The causes of death were convulsions in 2 cases and pulmonary oedema or haemorrhage in 3.

(d) Immunosuppressive therapy
In view of the failure of corticosteroids, penicillin and haemodialysis to prolong survival, we are currently assessing the value of immunosuppression with drugs such as Imuran.