NUTRITIONAL TREATMENT OF CHRONIC RENAL FAILURE

edited by

SERGIO GIOVANNETTI CLINICA MEDICA I°,

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To the memory of Prof. Gabriele Monasterio

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LIST OF ABBREVIATIONS USED IN THIS BOOK

AA, amino acids ACE, angiotensin converting enzyme BW, body weight CAPD, continuos ambulatory peritoneal dialysis CLND, conventional low-nitrogen diet CR, creatinine CRcl, creatinine clearance CRF, chronic renal failure EAAs, essential ammo acids GFR, glomerular fittration rate GN, glomerulonephritis HBV, high biological value HPTH, hyperparathyroidism IN, interstitial nephritis KAs, keto analogues of amino acids LPD, low-protein dict MHD, maintenance hemodialysis PD, peritoneal dialysis Pi, inorganic phosphorus PKD, polycystic kidney disease PR, protein PTH, parathyroid hormone

RBF, renal blood flow sCa, serum calcium sCR, serum creatinine SD, pure vegetarian supplemented diet GAZ J MONTANAMINA 40 TEN SPi, serum inorganic phosphorus sUR, serum urea concentration uCR, urinary creatinine uPi, urinary inorganic phosphorus UR, urea uUR, urinary urea

Several other abbreviations are reported at the beginning of Chapter 3 and in other chapters.

ACL, ancient see converting enzyme in W. body weight CAPD, contractes author over pertons at dialysis CLMD, conventional love mesons of the CR, cremone CRI, chemic clearing effect, en monine clearing effect, eventual failure CRI, chemic renal failure CRI, chemic renal failure GR, ghans ridur fittration rue GR, ghans ridur fittration rue GR, ghans ridur fittration rue GR, phonorulomephritis GR, phonorulomephritis HPTH, in perparathyroidism HPTH, in perparathyroidism KAS, he to airdogues at annuo acute KAS, he to airdogues at annuo acute LPD, how-protein duar PR, percent dialysis
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tation, which is decreasing due to a reduction in the number of accidents, makes this therapy possible for only a few fortunate patients. Even without considering rejection and the other problems of transplantation, this problem of supply makes transplantation an unsatisfactory therapy.

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Maintenance dialysis has the same drawback: Only a small percentage of the world's patients with chronic renal failure are dialyzed. Only in a few countries are facilities for hemodialysis available for all patients who need it, in most countries, peritoneal dialysis is not even regularly performed. Moreover, dialyzed patients are not without problems: latrogeme factors, together with hormonal and metabolic derangements of ureima, which are not corrected by dialysis, often create a new morbid condition after some years.

The answers to the question. Why dietary therapy? are clear. In the countries where dialysis is not performed dietary therapy may substitute replacement therapy until problems of fluid retention appear. In countries where dialysis as regularly performed, dietary therapy may prolong the probliditysis period, may prevent the hormonal and metabolic derangements that usually appear in this stage, may make possible and safe reductions in the frequency of dialysis, and, thially, proper dietary manipulations specifically, planned for patients on replacement therapy may prevent the appearance of the syndrome that often occurs in patients treated with dialysis for a long time.

Digrary treatment is then not necessarily an alternative to didysis. It is an alternative when dialysis is not performed. When dialysis is not performed. When dialysis is performed, dictary

Enormous progress has been made in the treatment of chronic renal failure over the last decades. Until the 1950s, chronic renal failure was considered to be an inexorably lethal condition. This is no longer the case. In addition, the disease, severe uremic syndrome, is now extremely rare, if existent at all, in industrialized countries.

Physicians of my generation who saw patients hospitalized with hemorraghes, pericarditis, severe anemia, cardiac failure, "malignant hypertension," pruritus, vomiting, generalized edema, and convulsions are particularly grateful for this progress.

I well remember seeing such patients hospitalized in the last days or weeks of their lives and also remember the sense of impotence I suffered for the complete lack of efficient measures I had at my disposal to manage their condition.

Nowadays, hemodialysis, peritoneal dialysis, and kidney transplantation allow patients with chronic renal failure to survive for very long periods of time in a satisfactory condition. Why then is there still a sense of dissatisfaction and why should we study dietary management? The drawbacks of dialysis and transplantation are the main reasons, but the certainty that dietary therapy is complementary to dialysis and even better than dialysis in certain conditions, is also very important.

Kidney transplantation is the best treatment for chronic renal failure at present, but the gap between the demand, which is continuously increasing, for long survival times of dialyzed patients and the supply of organs for transplan-

tation, which is decreasing due to a reduction in the number of accidents, makes this therapy possible for only a few fortunate patients. Even without considering rejection and the other problems of transplantation, this problem of supply makes transplantation an unsatisfactory therapy.

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Dietary treatment is then not necessarily an alternative to dialysis. It is an alternative when dialysis is not performed. When dialysis is performed, dietary

treatment is of enormous help as a complementary therapy.

Several issues are discussed in this book, with the intent of either giving updated scientific experiences or removing prejudices and skeptical attitudes, which are an obstacle to the diffusion of dictary therapy. I am aware that removing prejudices is a difficult task, but I believe this attempt is my duty and I hope the goal will be achieved a way only nonctaining win to sociated markes, concarding severe mential cardiar failure, inclument hypertension."

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