



# *Progresión del sistema renina angiotensina, remisión y regresión de las nefropatías crónicas*

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The number of patients with chronic renal disease is increasing world-wide. Most of chronic nephropathies lack of a specific treatment and progress relentlessly toward ESRD. In the last two decades an enormous wealth of information have been gathered from animal and human studies that have shed light on the mechanisms of progression and indicated means to prevent it. The concept of renoprotection has emerged and is already growing into a combined approach to renal diseases. Pharmacological control of blood pressure and reduction of proteinuria have proven to be the most important measures to arrest progression. A multimodal protocol is emerging as the modern management for renal patients, which includes combination of several antihypertensive drugs lowering lipids, smoking cessation, tight glucose control for diabetics. A number of new compounds are under evaluation in animal studies, and hopefully will become soon part of the treatment strategy.

With the available therapies, delay of dialysis initiation is an achievable goal today for many patients with chronic nephropathies, but it is only a limited result, being the perspective of less dialysis what is really needed. Remission of renal diseases and regression of renal structural damage of the kidney are the pre-requisite for such objective: there are initial experimental and clinical data that give support to the notion that it is possible. Less dialysis (and maybe no more, for some patients) remains an optimistic but not unfounded perspective for the years to come.

Renal replacement therapy (RRT), either by hemodialysis, peritoneal dialysis, or renal transplantation, provides patients with end stage renal disease (ESRD) with a long survival, and in most cases with a good quality of life. In all rich countries every year new dialysis patients outnumber those who died, allowing the stock of patients on RRT to grow in parallel with costs. Providing adequate treatment to all patients is indeed extolling a significant proportion of the health care budget and is being considered with concern by those who have responsibility such as health providers and policy makers. Since the prospect of rationing dialysis and establishing priorities for treatment is out of question, we should take upon us the challenge to search strategies to prevent dialysis for as many patients as possible.

Many years ago a Professor of Medicine in Manchester, Dr. Robert Platt, was the first to have the intuition that renal failure was the consequence of structural and functional adaptation to loss of kidney substance. He established the concept of renal failure «as an extremely efficient function by a renal remnant now too small for its task». For many years the nephrologists have spent all the efforts to avoid loss of nephrons, most often with little success, by attempting to cure renal diseases. In the early Eighties Dr. Barry Brenner changed completely the perspective, rather pointing the attention on the preservation of the function of remaining nephrons by blocking the progression due to nephron loss. A completely new era of Nephrology started from his seminal work.