When Kidney Is the Difference

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Although the available evidence about the management of hypertension is huge, data about hypertensive patients with chronic kidney disease are quite scarce. Fortunately, in the last few years, several papers have focused on this topic so as to improve the management of this population. Classically, blood pressure targets consisted of <140/90 mmHg for the general population and <130/80 mmHg for diabetics or patients with renal insufficiency. However, in recent years there has been increasing concern about the real benefits of an intensive blood pressure reduction approach, particularly in high-risk patients such as those with diabetes or ischemic heart disease. But what happens in those with kidney disease? In a study that included more than 1000 patients with hypertensive chronic kidney disease, only those with baseline proteinuria could benefit from intensive blood-pressure control.

The ONTARGET trial showed that, in patients with vascular disease or high-risk diabetic subjects without heart failure, the combination of an angiotensin-converting enzyme inhibitor and an angiotensin receptor blocker was associated with more adverse events without an increase in benefit. Nonetheless, in a recent study performed in diabetics, that combination was not detrimental for patients with proteinuria or an estimated glomerular filtration rate <60 ml/min, and was even associated with fewer macrovascular events.

On the other hand, the effects of aspirin have been analyzed in hypertensive patients with chronic kidney disease. This point is very relevant, since both cardiovascular and perhaps bleeding risks are increased in patients with chronic kidney disease. The main results of this study showed that the addition of aspirin to standard therapy produced a greater absolute reduction in major cardiovascular events and mortality in hypertensive patients with chronic kidney disease than in those with normal kidney function. And this relationship increased with the severity of renal disease. Moreover, major bleeding events were not significantly greater with a lower estimated glomerular filtration rate.

Therefore, in patients with severe renal disease it seems that blood pressure targets should be <140/90 mmHg, except in those with proteinuria. Although renin-angiotensin system inhibition plays a key role in the treatment of patients with hypertension and renal impairment, the combination of an angiotensin-converting enzyme inhibitor and an angiotensin receptor blocker should probably only be recommended in diabetics with proteinuria or an estimated glomerular filtration rate <60 ml/min. The addition of aspirin to the treatment of patients with hypertension and chronic kidney disease could be recommended. In summary, it appears that hypertensive patients with renal dis-
ease exhibit particular characteristics that should be known in order to improve the therapeutic approach in this very high-risk population.

References