

PEARLS Practical Evidence About Real Life Situations

Aldosterone antagonists may prevent progression of chronic kidney disease

Clinical question	How effective are aldosterone antagonists in patients with chronic kidney disease (CKD) currently treated with angiotensin converting enzyme inhibitors (ACEi) and angiotensin receptor blockers (ARB)?
Caveat	There was a significant reduction in proteinuria, and systolic and diastolic blood pressure with the addition of non-selective aldosterone antagonists to ACEi and/or ARB, but without improvement in renal function. In two studies, the addition of selective aldosterone antagonists to ACEi resulted in an additional reduction in 24-hour proteinuria but without any impact on blood pressure and renal function. In patients with CKD with GFR >30mL/min/1.73 m2 who have persistent proteinuria despite being on maximal doses of ACEi and/or ARB, aldosterone antagonists could be added to reduce proteinuria Addition of aldosterone antagonists did not improve glomerular filtration rate. There was a significant increase in the risk of hyperkalaemia with the addition of non-selective aldosterone antagonists to ACEi and/or ARB.
1	Data on cardiovascular outcomes, long term renal outcomes and mortality were not available.
Context	Treatment with ACEi and ARB is increasingly used to reduce proteinuria and retard the progression of CKD. However, some patients do not attain complete resolution of proteinuria and might have higher aldosterone levels within a few months of treatment. The addition of aldosterone antagonists may be beneficial to these patients for reduction of progression of renal damage.
Cochrane Systematic Review	Navaneethan SD et al. Aldosterone antagonists for preventing the progression of chronic kidney disease. Cochrane Reviews 2009, Issue 3. Article No. CD007004. DOI: 10.1002/14651858.CD007004.pub2. This review contains 10 studies involving 845 participants.
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