



The detection and management of patients with chronic kidney disease in primary care

A consensus statement on the identification and management of chronic kidney disease (CKD) in primary care was released in 2014. It is recommended that kidney function testing be linked to routine cardiovascular risk assessments and diabetes testing for patients with risk factors for CKD. Population screening for CKD is not recommended.

Chronic kidney disease describes any long-term condition that affects kidney structure and function. The number of people in New Zealand with CKD is currently unknown, although an estimate of 7–10% of the population is reasonable. The clinical challenge of CKD is to distinguish patients with progressively declining renal function due to disease from those with uncomplicated, age-related declining renal function. Progressive CKD refers to patients with CKD with an estimated Glomerular Filtration Rate (eGFR) declining at a rate > 5 mL/min/year. Patients with untreated progressive CKD are at extremely high risk of experiencing a cardiovascular event, and are likely to require dialysis and/or kidney transplantation, if they live long enough.

Patients with CKD can be identified in primary care by both serum creatinine and albumin:creatinine ratio testing. Patients with risk factors for CKD should be assessed at least every one to two years. For patients with diabetes this assessment should be performed at least annually.

Most patients with stable CKD can be fully managed in primary care. The decision to refer a patient with CKD should be individualised, however, all patients with any of the following should be referred to a nephrologist: progressive CKD with an eGFR < 45 mL/min/1.73², evidence of intrinsic kidney disease, e.g. glomerulonephritis, resistant hypertension and/or significant issues with blood glucose control and/or multiple vascular complications.

Controlling blood pressure is the most important aspect of CKD management; if the patient has diabetes then glycaemic control is also a focus. The target blood pressure for patients with CKD and diabetes or proteinuria is $\leq 130/80$ mmHg, and $\leq 140/90$ mmHg for most other patients. However, blood pressure targets may need to be flexible and in older patients a blood pressure target of $< 150/90$ mmHg may be reasonable. Angiotensin converting enzyme (ACE) inhibitors are the first-line treatment for controlling blood pressure in patients with CKD. A HbA_{1c} target < 53 mmol/mol is generally appropriate for patients with CKD and diabetes, although a target HbA_{1c} ≥ 53 mmol/mol may be more appropriate for patients at risk of hypoglycaemia.

Patients with stable CKD (stage 3 – 4) have a five-year cardiovascular risk $> 15\%$ and $> 20\%$ if diabetes is also present. Additional medicines, e.g. statins and aspirin, should be initiated for these patients according to cardiovascular guidelines. Patients with established CKD should have their eGFR and albuminuria assessed at least annually. This should be performed more regularly for patients with an increased risk of progressive CKD. Patients with progressive stage 3 – 4 CKD require intensive management with weekly or fortnightly review of risk factor management until their condition is stable

Peer group discussion points:

1. Do you currently perform kidney function tests in conjunction with cardiovascular risk assessments or diabetes checks?
2. Some patients may find it difficult to understand the link between declining renal function and increasing cardiovascular risk, do you have any strategies for explaining this to patients?
3. Are you confident about diagnosing CKD and classifying the patient into a CKD stage? What are some of the challenges with this?
4. What are your general approaches to negotiating agreed glycaemic targets in patients with CKD and diabetes?
5. At what point do you usually consider referring a patient with CKD to a nephrologist? Would this first involve a telephone discussion and/or virtual referral to the nephrologist?

Original article in BPJ 66 (February, 2015)