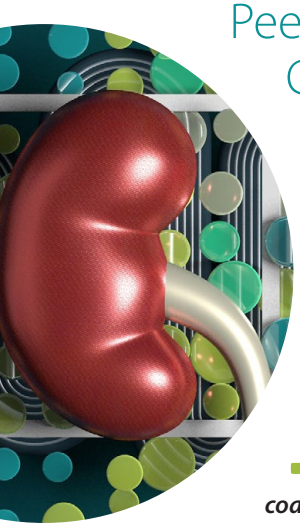

Peer group discussion: Chronic kidney disease (CKD)

The following questions can be used as discussion points for peer groups or self-reflection of practice.

It is strongly recommended that the following article is read before considering the questions:

- ***Chronic kidney disease: the canary in the coal mine, bpac^{nz}, March, 2026***

CKD is defined as abnormalities of kidney structure or function, present for at least three months, with implications for health. It is associated with a substantial increase in cardiovascular disease (CVD) risk, particularly as kidney function declines further. While CKD itself is generally not reversible, cardio-renal-metabolic risk and progression to advanced CKD and end-stage kidney failure requiring dialysis or renal transplant can be reduced through early identification and management of the underlying cause of CKD, e.g. diabetes, hypertension, and other associated risk factors/co-morbidities.

Patients often experience a marked reduction in kidney function before symptoms become apparent. Therefore, testing for CKD by measuring blood pressure, requesting serum creatinine to estimate glomerular filtration rate (eGFR) and urine albumin:creatinine ratio (ACR) every one to two years is recommended based on the presence of risk factors, e.g. diabetes, hypertension, Māori/Pacific or South-Indo Asian ethnicity, increasing age. If eGFR or urine ACR results are abnormal (i.e. eGFR < 60 mL/min/1.73 m^2 or urine ACR ≥ 3 mg/mmol), repeat testing over the next three months depending on the clinical situation to confirm CKD. In some cases, creatinine-based estimation of GFR alone is not accurate and a combination of creatinine and cystatin C-based estimation of GFR is recommended, e.g. people with severe obesity.

Management of patients with CKD is achieved through lifestyle changes (e.g. weight loss, exercise, reducing sodium intake) and pharmacological treatment targeting albuminuria, hypertension, hyperglycaemia or another underlying cause. Combination pharmacological treatment (termed the "four pillars" approach) is becoming the new standard of care for patients with CKD, particularly for those with diabetes and at high risk of progression to advanced CKD. Depending on patient co-morbidities, this may include:

- An ACE inhibitor or ARB; ***and***
- A SGLT-2 inhibitor; ***and/or***
- A GLP-1 receptor agonist; ***and/or***
- A non-steroidal mineralocorticoid receptor antagonist (not routinely available in New Zealand)

In New Zealand, medicines availability and Special Authority funding restrictions influence the ability to adopt the "four pillars" approach for patients with CKD, however, use of these medicines should be prioritised wherever possible.

Patients with CKD require ongoing review to assess for complications and progression to advanced CKD, and to optimise their treatment regimen if co-morbidities are not adequately controlled, e.g. diabetes, hypertension. It is also an opportunity to reinforce positive lifestyle changes.

Questions for discussion

1. Deteriorating kidney function is a natural aspect of the ageing process. How confident are you in differentiating between CKD and normal age-related kidney function decline?
2. What are some common pitfalls or challenges during the diagnostic work-up for CKD? Were you surprised to read that albuminuria is one of the most important factors involved in CKD progression and CVD risk?
3. Lifestyle changes are an important foundation for CKD management, but long-term adherence can be challenging. What interventions do you find to be the most effective for patients with CKD? What strategies have you, or could you, use to improve engagement and adherence with interventions that are less tolerable?
4. The "four pillars" of CKD management (similar to the approach that is now standard practice for heart failure) targets different aspects of the cardio-renal system to reduce albuminuria, hypertension and hyperglycaemia, and therefore, reduce CKD progression and cardio-renal-metabolic risk. How has your perspective and approach towards CKD management changed over time? Do you take more of a "whole system" approach?
5. All patients with CKD should be taking an ACE inhibitor or ARB. Which medicine class do you prefer to prescribe and why? Acute changes in serum creatinine and potassium can occur following initiation of an ACE inhibitor/ARB. What is your usual approach to managing this?
6. SGLT-2 inhibitors have demonstrated cardio-renal benefits in people with CKD, including in those without diabetes. Therefore, empagliflozin should be added to the treatment regimen, where possible. What benefits have you observed in patients with CKD taking empagliflozin? Is it usually well tolerated? Empagliflozin

is only funded for patients with co-morbid diabetes or heart failure who meet certain criteria. How do you approach conversations around self-funding treatment? In your experience, are many patients who may benefit from empagliflozin but not eligible for funding, willing to pay? Do you have a system in place to regularly review whether patients who previously did not meet Special Authority criteria now do?

7. What is your general approach to the ongoing management of patients with CKD? What are the key parameters that you monitor? What are some common changes to the medicine regimen that you make? In your experience, what are the most common complications that occur as CKD progresses?

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