**DIETARY MODIFICATION**

A Dietary protein restrictions (<0.8 g/kg/day) are not recommended in patients with early stages of chronic kidney disease (stages 1-3).

B For patients with stage 1-4 CKD and hypertension a reduction in sodium (<2.4 g/day or <100 mmol/day which is equivalent to <6 g of salt) is recommended as part of a comprehensive strategy to lower blood pressure and reduce cardiovascular risk.

C Salt substitutes that contain high amounts of potassium salts should not be used in patients with CKD.

**LIFESTYLE MODIFICATION**

D People with CKD who smoke should be advised to stop and referred to an NHS smoking cessation service if they are motivated to quit.

E People with CKD with a waist circumference ≥94 cm in men or ≥80 cm in women should be considered for weight management with the involvement of an appropriately qualified dietitian.

F If patients experience a reduction in exercise capacity which impacts on their daily life, they should have access to an appropriately qualified physiotherapist.

G All patients with CKD who have problems with the activities of daily living should have access to an occupational therapist.

**PSYCHOSOCIAL MANAGEMENT**

H Quality of life and psychosocial stressors should be routinely assessed and actively managed psychologically, where indicated.

**MANAGEMENT OF ANAEMIA**

I Erythropoiesis stimulating agents should be considered in all patients with anaemia of CKD to improve their quality of life.

J In patients with CKD treated with erythropoiesis stimulating agents the haemoglobin should normally be kept between 100 g/l and 120 g/l.

**PREVENTING MALNUTRITION**

K Nutritional status (height, weight, body mass index, percentage weight loss) should be monitored in all patients with chronic kidney disease at stage 3 or higher.

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**ALGORITHM FOR SCREENING ASSESSMENT AND DIAGNOSIS OF PATIENTS WITH CKD**

A Diabetic patients Surveillance

B Hypertension Cardiovascular disease Smoking Obesity Increased awareness

C Initial abnormality detected

D Other patients Incidental

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This Quick Reference Guide provides a summary of the main recommendations in the SIGN guideline on Diagnosis and management of chronic kidney disease.

Recommendations are graded A, B, C, D to indicate the strength of the supporting evidence.

Good practice points are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: www.sign.ac.uk
The following factors are associated with an increased risk of developing CKD:

- Diabetes
- Cardiovascular disease
- Smoking
- Socioeconomic status

Detection of an increase in protein excretion has both diagnostic and prognostic value in the initial detection and confirmation of renal disease.

**PROTEINURIA**

Detection of an increase in protein excretion has both diagnostic and prognostic value in the initial detection and confirmation of renal disease.

**Albumin/Creatinine Ratio**

- In patients with diabetes, albumin/creatinine ratio may be used to exclude diabetic nephropathy.
- Albumin/creatinine ratio is recommended for detecting and monitoring diabetic nephropathy.

**Protein/Creatinine Ratio**

- In patient groups with a high prevalence of proteinuria without diabetes protein/creatinine ratio may be used to exclude CKD.

**Urine dipstick testing**

- Urine dipstick testing cannot be used reliably in isolation to diagnose the presence or absence of proteinuria.
- Dipstick proteinuria (≥1+) can be used to identify patients at risk of subsequent end-stage renal disease and cardiovascular disease.

**CLASSIFYING CKD**

The KDOQI classification system should only be used to stage patients with a diagnosis of CKD.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>GFR (ml/min/1.73 m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>Kidney damage with normal or raised GFR</td>
<td>≥90</td>
</tr>
<tr>
<td>2*</td>
<td>Kidney damage with mild decrease in GFR</td>
<td>60-89</td>
</tr>
<tr>
<td>3A</td>
<td>Moderately lowered GFR</td>
<td>45-59</td>
</tr>
<tr>
<td>3B</td>
<td>Moderately lowered GFR</td>
<td>30-44</td>
</tr>
<tr>
<td>4</td>
<td>Severely lowered GFR</td>
<td>15-29</td>
</tr>
<tr>
<td>5</td>
<td>Kidney failure (end-stage renal disease)</td>
<td>&lt;15</td>
</tr>
</tbody>
</table>

Notes: *in order to diagnose stages 1 and 2 CKD, additional evidence of kidney damage must be present, e.g., proteinuria.

If proteinuria (>1 g per day or >100 mg/mmol) is present the suffix p should be added.

Patients on dialysis are classified as stage 5D.

The suffix T indicates patients with a functioning renal transplant (can be stages 1-5).

**HAEMATURIA**

- Patients with persisting isolated microscopic haematuria should be initially evaluated for urinary tract infection and malignancy.

**RENSAL TRACT ULTRASOUND**

- Ultrasound is the imaging modality of choice in the evaluation of patients with suspected CKD.

**MEASURING RENAL FUNCTION**

- Laboratories should only report a numerical value at estimated GFRs of less than 60 ml/min/1.73 m².
- Where accuracy is an overriding consideration, clearance should be measured using a validated standard.

**LOWERING BLOOD PRESSURE**

- Blood pressure should be controlled to slow the deterioration of GFR and reduce proteinuria. Patients with ≥1 g/day of proteinuria (approximately equivalent to a protein/creatinine ratio of 100 mg/mmol) should have a target maximum systolic blood pressure of 130 mm Hg.

**REDUCING PROTEINURIA**

- Patients with CKD and proteinuria should be treated to reduce proteinuria.

**ACE INHIBITORS AND ARBS**

- Patients with CKD and type 1 diabetes with microalbuminuria should be treated with an ACE inhibitor irrespective of blood pressure.

**LIPID LOWERING**

- Statin therapy should be considered in all patients with stage 1-3 CKD, with a predicted 10-year cardiovascular risk ≥20%.

**ANTIPLATELET THERAPY**

- Low-dose antiplatelet therapy should be considered in all patients with stage 1-3 CKD, whose estimated 10-year cardiovascular risk is ≥20%.