



The RPSG

The Renal Patient Support Group

Primary Care



Establishing cause and preventing of CKD

CKD occurs across various ages and population, and depending on form of CKD – there can be incidences and prevalence across different ethnicities and populations.

Common causes of CKD are:

- Nephropathy
- Hypertension and Renovascular disease,
- Glomerulonephritis,
- Interstitial Nephritis due to reflux nephropathy,
- Polycystic Kidney Disease,
- Obstructive Uropathy

CKD Stages



Stage 1-2 CKD	Monitor Annually
Stable Stage 3 CKD	Monitor annually
Progressive Stage 3 CKD (Fall in eGFR of >2ml/min/1.73m ² over 6 or more months)	Monitor 6 monthly
Stage 4-5 CKD	Monitor 3 monthly



Cause and Prevention

- Establishing the cause, which usually requires imaging and may require renal biopsy, is important because in some cases treating the primary disease prevents renal damage.
- Control of blood pressure and reduction of proteinuria can prevent deterioration in renal function.
- Proteinuria predicts progression to end stage renal disease, and if proteinuria is decreased progression to End-Stage Renal Disease (ESRD) is reduced.

Establishing cause and preventing of CKD



- Drugs that counteract the action of angiotensin II to lower proteinuria, and slow the rate of CKD disease progression in both renal disease that are aligned to proteinuria and haematuria.
- In about a quarter of patients receiving RRT in the UK, the cause of the underlying renal disease is unknown. However, renal registry data have allowed tracking and documentation.

CKD Complications



- Treatment of anaemia with recombinant human erythropoietin avoids the requirement for blood transfusions and improves quality of life.
- The management of renal anaemia in the UK is co-ordinated by specialist nurses, which expertise between primary and secondary care in the assessment, prescribing and monitoring of treatment.
- Treatment of iron deficiency is required to maximise erythropoiesis, and intravenous iron may be needed.



CKD Complications

- The management of Mineral Bone Disease in CKD is complex and rapidly advancing as new treatments to control calcium, phosphate and PTH levels are experimented.
- Calcium, phosphate and intact plasma PTH should be measured in recipients with CKD and GFR should be determined, especially if $<60\text{mL}/\text{min}/1.73\text{m}^2$.



RRT Preparation

- Late referral is defined as referral of a recipient with progressive renal failure from primary to secondary care less than 3 months before the need to start RRT.
- About 1/3 of recipients are referred to a nephrologist at a late stage of renal disease. This is associated with a poorer state at the start of haemodialysis – worse outcome and higher healthcare costs.
- All recipients with a progressive increase in serum creatinine level need referral to a nephrologist, and preparation for RRT

RRT Preparation



Preparation involves:

- Identifying and treating reversible cause of renal failure,
 - Slowing the progressive decline in renal function,
 - Managing the complications associated with CKD
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- The entry into RRT programmes for all recipients who might benefit requires involvement of multidisciplinary teams between healthcare sectors.
 - CKD must be identified at an early stage, so the appropriate treatment can be initiated and the need for nephrological referral, assessed.

Preparing for RRT



- Evidence suggests that recipients with CKD can go under-diagnosed.
- The majority of recipients with CKD do not not undergo routine monitoring of renal function or related parameters to enable appropriate management or of complications.
- Implementation of guidelines relating to the identification, management and referral still require a considerable change in current practice and additional resources in primary care.



What to monitor in Primary Care

- ABP
- Full Blood Count (FBC)
 1. Haemoglobin
 2. Creatinine and eGFR
 3. Na^+ , K^+
 4. Ca^{2+} , PO_4^{-3}
 5. PTH (annually, if $<70\text{ng/l}$, no further tests required unless patients goes to Stage 4)
- Urinalysis
- Polypharmacy - including over the counter medicines

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