

NEPHROLOGY I

Learning Objectives for Controversies in Assessing Kidney Function

1. Evaluate methods to estimate and measure creatinine clearance and glomerular filtration rate (GFR) in patients with chronic kidney disease (CKD).
2. Given a case scenario, justify the use of CKD staging according to Kidney Disease Outcomes Quality Initiative (KDOQI) criteria.
3. Assess the use of serum creatinine-based estimates of kidney function in various patient populations including CKD, pediatrics, and the elderly.
4. Judge the appropriateness of using serum cystatin C as a quantitative index of kidney function.
5. Compare and contrast the clinical limitations, economics, and practicability of various methods to evaluate proteinuria.
6. Design an individualized drug dosage regimen based on kidney function.

Learning Objectives for Anemia in Patients with Chronic Kidney Disease

1. Distinguish absolute iron deficiency from functional iron deficiency in chronic kidney disease (CKD).
2. Discuss the pros and cons of common laboratory tests used to monitor iron therapy in patients with CKD.
3. Demonstrate an understanding of the risk factors for erythropoiesis stimulating drug-induced hyporesponse.
4. Devise a therapeutic plan for a patient with CKD and anemia.
5. Devise a therapeutic plan for a patient with hyporesponsiveness to erythropoiesis stimulating drug (ESA).

Learning Objectives for Controversies in Treating Cardiovascular Disease in Patients with Chronic Kidney Disease

1. Analyze the evidence regarding the diagnostic use of troponin in patients with chronic kidney disease (CKD) and recent evidence for appropriate renal protection when patients with CKD undergo percutaneous coronary interventions.
2. Account for the cardiovascular benefit of cholesterol modification in patients with CKD and assess the impact of statin-induced proteinuria on patient management.
3. Justify the National Kidney Foundation's recommendation that patients with CKD should be considered coronary heart disease risk equivalent regardless of other risk factors.
4. Be able to construct a treatment approach for a patient with cardio-renal syndrome and appropriately incorporate emerging therapies in managing chronic heart failure (CHF) in patients with CKD.
5. Assess the atherosclerotic process in CKD patients and in non-CKD patients and be able to construct an appropriate treatment plan to reduce vascular risk in a CKD population.
6. Be able to alter recommendations for hypertension (HTN) management based on the presence of CKD.