

**Harvard Medical School Department of
Continuing Education and the Renal Division
of Brigham and Women's Hospital**



Nephrology Rounds
2009 Volume 7 – Issue 8

Anemia in Chronic Kidney Disease and End-Stage Renal Disease

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Objectives:

This issue of *Nephrology Rounds* will allow the reader to:

- Understand the pathogenesis of anemia in chronic kidney disease (CKD) and end-stage renal disease
- Know the available therapeutic agents that are used for treatment of renal anemia and their applications
- Know the therapeutic targets in treatment of renal anemia
- Understand the rationale for these targets based on the available clinical evidence

Questions:

1. Patients with end-stage kidney failure on dialysis are more likely to have anemia and/or require therapy for anemia than patients with stage III CKD.
True False
2. Iron deficiency is the most common cause of anemia among patients with stage IV CKD (estimated glomerular filtration rate 15-29 mL/min/1.73 m²).
True False
3. Supplemental iron is contraindicated among hemodialysis patients with transferrin saturation <20%, but with serum ferritin 200-500 ng/mL.
True False
4. Darbepoetin alfa has a longer half-life than erythropoietin alfa.
True False
5. Erythropoiesis stimulating agent (ESA) hyporesponsiveness in the absence of iron deficiency should prompt consideration of occult sources of systemic inflammation.
True False
6. Current guidelines support initiation of ESA therapy when hemoglobin levels fall below normal levels based on gender.
True False
7. Full (versus partial) anemia correction results in better longevity among patients with stage IV CKD.
True False

8. Observational studies suggest that hemodialysis patients with hemoglobin levels between 11 g/dL and 12 g/dL live longer than those with hemoglobin <10 g/dL.

True

False

9. Partial anemia correction is associated with improved cognitive function among hemodialysis patients.

True

False

10. Following renal transplant, patients do not require screening for anemia.

True

False

11. This issue of *Nephrology Rounds* adequately addressed the topic, and the data and discussion were fair and balanced.

AGREE

DISAGREE

12. Potential conflicts of interest disclosed by the author on the back page were properly expressed.

AGREE

DISAGREE

13. The information presented in this issue of *Nephrology Rounds* will increase my clinical knowledge and improve the care of my patients.

AGREE

DISAGREE

14. *Nephrology Rounds* from Brigham and Women's Hospital and Harvard Medical School is an effective CME program.

AGREE

DISAGREE

Comments/Topic Suggestions: _____

To receive AMA category 1 credit, you must correctly answer 60% of questions 1-10, and answer 11-14.

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