

# Normocytic Anemia: Causes, Signs, and Symptoms

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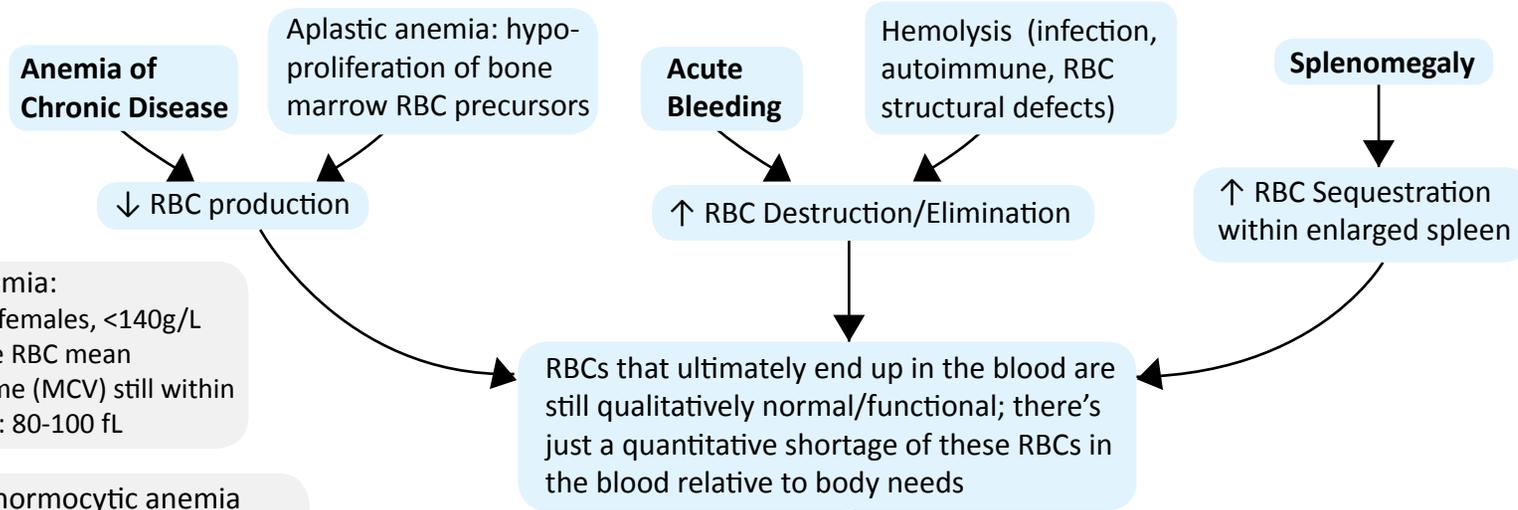
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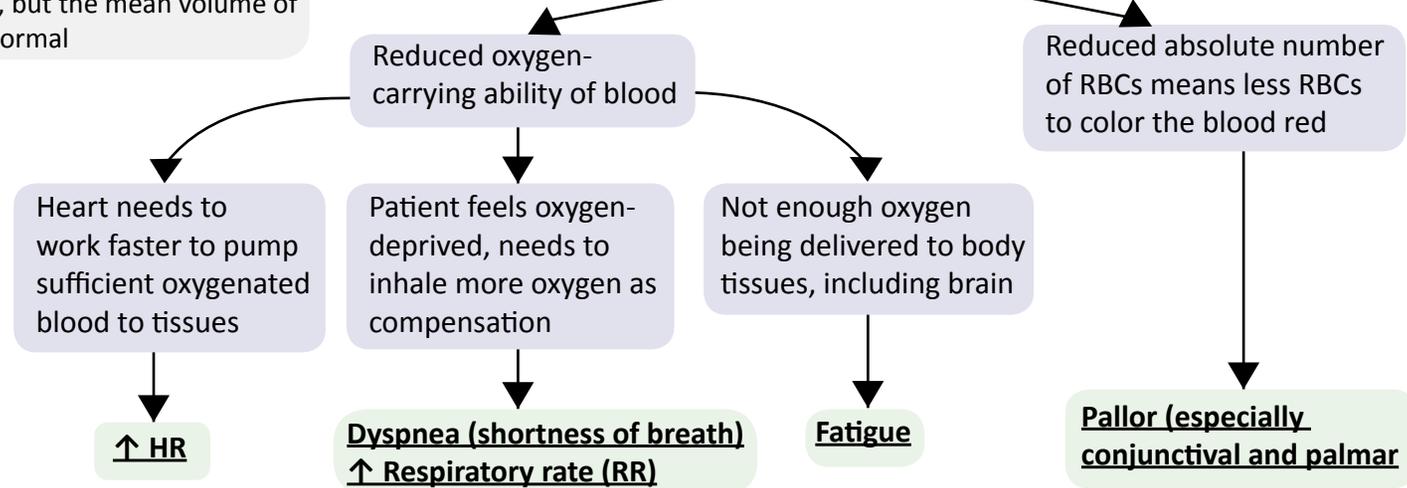
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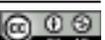
**Normocytic Anemia:**  
[Hgb] <120g/L in females, <140g/L in males, with the RBC mean corpuscular volume (MCV) still within the normal range: 80-100 fL

**Spurious/False normocytic anemia**  
Any fluid overload state (pregnancy, heart failure, kidney disease, etc) can ↑ plasma volume, which can dilute RBCs and cause apparent anemia, but the mean volume of each RBC is still normal

## Normocytic Anemia



**Note:**  
Other signs and symptoms exist for normocytic anemia, and are etiology-specific!



# Anemia of Chronic Disease: Pathophysiology and Clinical Manifestations

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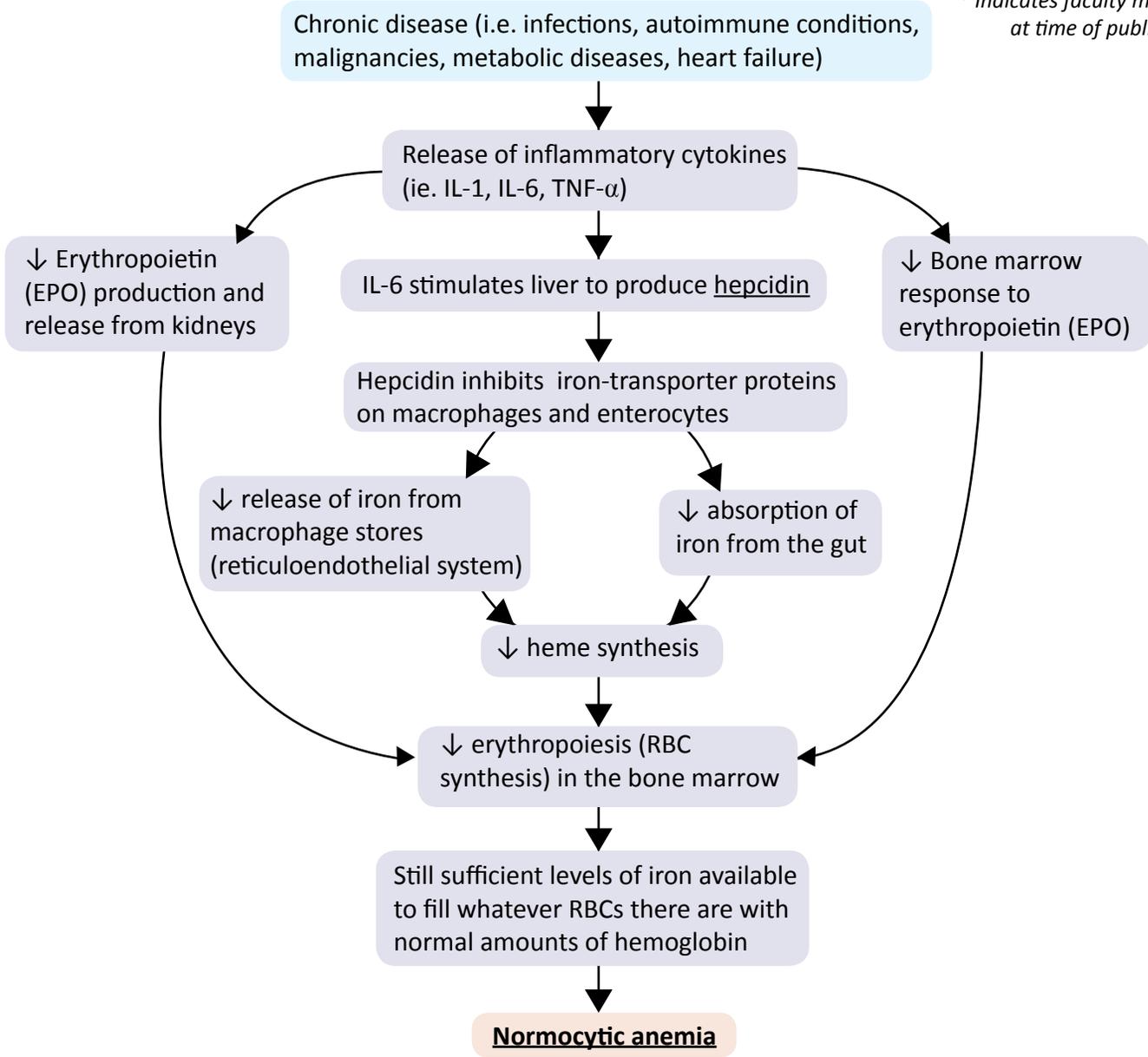
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**One theory to explain why “anemia of chronic disease” exists:**

The inflammatory cytokine response to chronic disease serves an adaptive evolutionary purpose.

Bacteria often require iron as a nutrient for survival. The body’s ability to lock up iron stores in times of potential infection may help to inhibit bacterial growth.

Long-term, however, it results in anemia.



# Hemolytic Anemia: Pathophysiology behind the Normocytic Anemia

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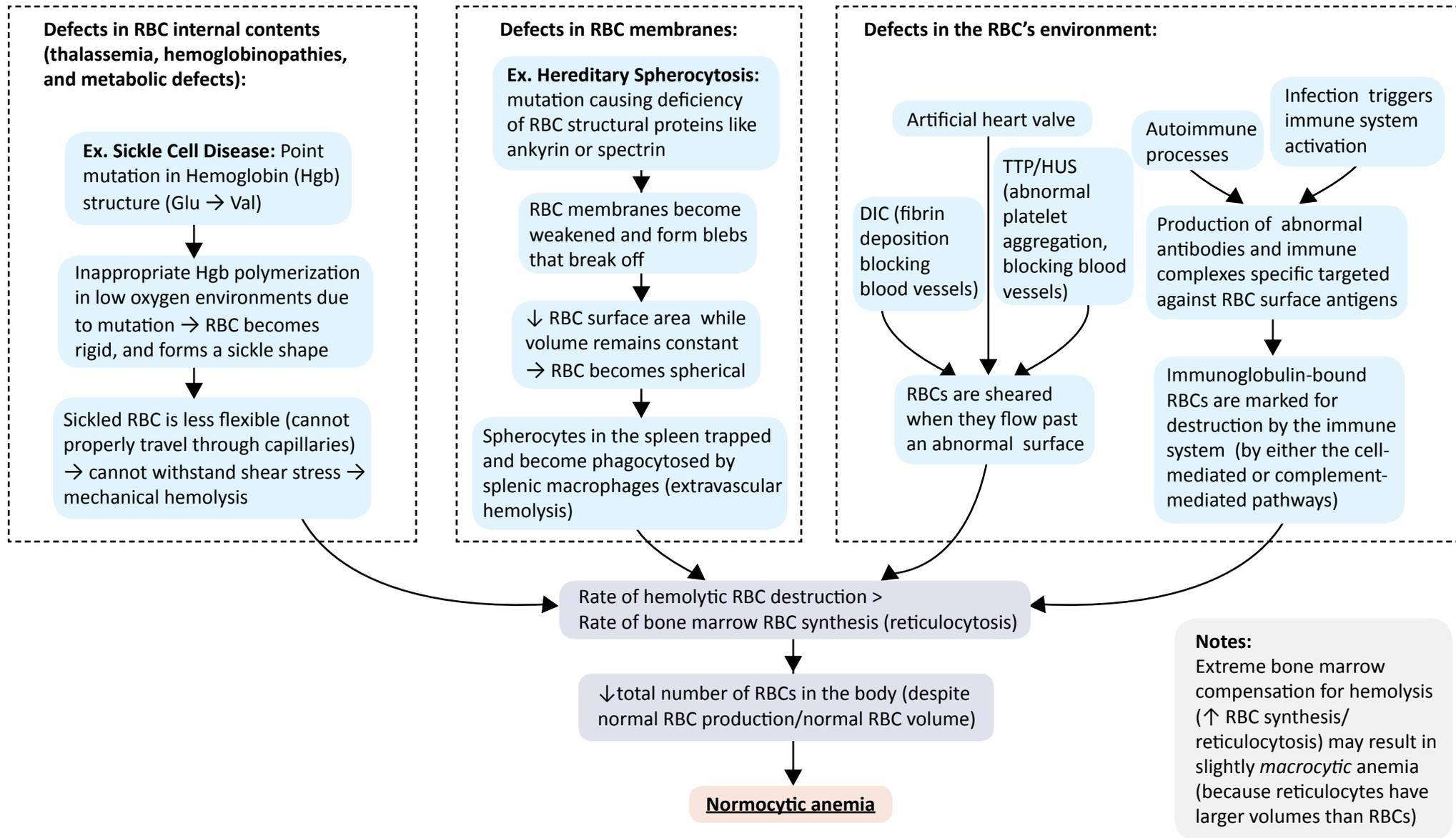
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# Hemolytic Anemia:

## Signs and symptoms of Hemolytic Anemia

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