

## Tiredness

A 33-year-old woman presents with history of feeling tired for the past 3 months and has trouble waking up each morning because she feels exhausted instead of refreshed. she also feels dyspneic when uses stairs. she denies any history suggestive of chronic cardiac or respiratory problem

**What is the likely cause of her symptoms? Discuss other relevant area in the history that you need to focus in and why?**

Her vital signs include a heart rate of 92/min, blood pressure of 135/80 mm Hg, and respiratory rate of 20/min. Her examination is otherwise unremarkable.

Relevant laboratory results are as follows:

WBC count: 5600/mm<sup>3</sup>

Hemoglobin: 9.2 g/dL

Platelet count: 225,000/mL

Mean corpuscular hemoglobin: 21 pg

Mean corpuscular hemoglobin concentration: 29%

Mean corpuscular volume: 72 fL

**What is the most likely diagnosis?**

**What is the pathogenesis of this condition?**

**What other screening might be necessary for this patient?**

**List three tests used to confirm the diagnosis of the possible underlying cause of the anemia?**

### ADULT REFERENCES OF RED BLOOD CELLS

	Male	Female
Hemoglobin (g/dl)	14 – 18	12 – 16
Hematocrit ; PCV (%)	42 -52	37 – 47
RBC count( $\times 10^{12}/l$ )	4.5 – 6.2	4– 5.5
Mean Cell Volume MCV (fl)	80 -95	80 - 95
Mean Cell Hemoglobin MCH (pg)	27 -34	27 - 34
Mean Cell Hemoglobin Concentration(MCHC)	30 -35	30 -35