# Full Haemogram Interpretation

**Microcytic Anemia:** Low MCV, MCH, MCHC (hypochromia)

**Macrocytic Anemia:** High MCV, MCH, MCHC, low Hb

### Causes of Anemia

* **Anemia due to impaired red cell production**

Aplastic anemia, malignancies (leukemia, lymphoma), infections, storage disorders, etc.

* **Impaired erythropoietin production**

Chronic renal disease, hypothyroidism, chronic inflammation, protein malnutrition

* **Abnormalities of cytoplasmic maturation/ nuclear maturation**

Iron deficiency, sideroblastic anemia, thalassemia, lead poisoning, folic acid & B12 deficiency, thiamine deficiency

* **Hemolytic anemias**

SCD, G6PD deficiency, thalassemia, hereditary spherocytosis

* Anemia due to blood loss

### Causes of Neutrophilia

Acute bacterial infection (pneumonia, meningitis), acute rheumatic fever, MI, post-op, RA, steroid therapy, CML

### Causes of Lymphocytosis

TB, syphilis, CLL, lymphoma, infectious mononucleosis, mumps, measles, viral infections

### Causes of Monocytosis

TB, malaria, leishmania, CML, SLE, Crohn’s disease, ulcerative colitis

### Causes of Eosinophilia

Asthma, hookworm infestation, eczema, filariasis, hayfever

### Causes of Neutropenia

Drugs (phenytoin, penicillin), SLE, HIV, Hep. B, EBV, malaria

### Causes of Lymphocytopenia

Corticosteroids, cytotoxic drugs, AIDS, miliary TB

### Causes of Thrombocytopenia

Pregnancy, HIV, drugs (heparin, digoxin, acetaminophen), DIC, acute leukemias

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