WELCOME

TO



This is an Education Platform

We provide Free PDF Notes and Videos Classes for Pharmacy Students

Web Site http://www.fdspharmacy.in/

You tube https://www.youtube.com/c/FDSpharmacy

What app https://chat.whatsapp.com/IzSgXtFEvhS4LN5xhUgq5z

Telegram https://t.me/Fdspharmacy

Face book https://www.facebook.com/615501075383l3/

E-mail fdspharmacyinfo@gmail.com

As Per New Syllabus ER 20

Diploma in Pharmacy 2nd Year

Pharmacotherapeutics Notes



All Chapter in One PDF

Visit our Website
WWW.fdspharmacy.in

As Per New Syllabus ER 20

Diploma in Pharmacy 2nd Year

Pharmacology Notes



All Chapter in One PDF

Visit our Website
WWW.fdspharmacy.in

As Per New Syllabus ER 20

Diploma in Pharmacy 2nd Year

Hospital and Clinical Pharmacy Notes



All Chapter in One PDF

Visit our Website
WWW.fdspharmacy.in

As Per New Syllabus ER 20

Diploma in Pharmacy 2nd Year

Community Pharmacy & Management Notes



All Chapter in One PDF

Visit our Website
WWW.fdspharmacy.in

As Per New Syllabus ER 20

Diploma in Pharmacy 2nd Year

Biochemistry & Clinical Pathology Notes



All Chapter in One PDF

Visit our Website
WWW.fdspharmacy.in

As Per New Syllabus ER 20

Diploma in Pharmacy 2nd Year

Pharmacy Law & Ethics Notes



All Chapter in One PDF

Visit our Website
WWW.fdspharmacy.in

Diploma in Pharmacy 2nd Year
Pharmacotherapeutics
Chapter 2 (f) : Haematological Disorders

Topics	Page No
Haematological Disorders	3
▪ Iron Deficiency Anaemia	4
▪ Megaloblastic Anaemia	6

FDSPharmacy
Learn and Educate

Chapter 2 (f)

Haematological Disorders

- → Blood is an extremely complex fluid, composed of both formed elements (red cells, white cells, platelets) and plasma. RBCs (erythrocytes) are the most common formed elements, carrying Oxygen and haemoglobin.
- → White blood cells are function as mediators of immune responses to infection or other stimuli of inflammation.
- → Platelets are the formed elements that participate in coagulation. Plasma is largely water, electrolytes, and plasma proteins. The plasma proteins most important in blood clotting are the coagulation factors.
- → A group of haematological disorders characterized by the any disturbance in the physiological and morphological changes in the blood cell is called haematological disorder.

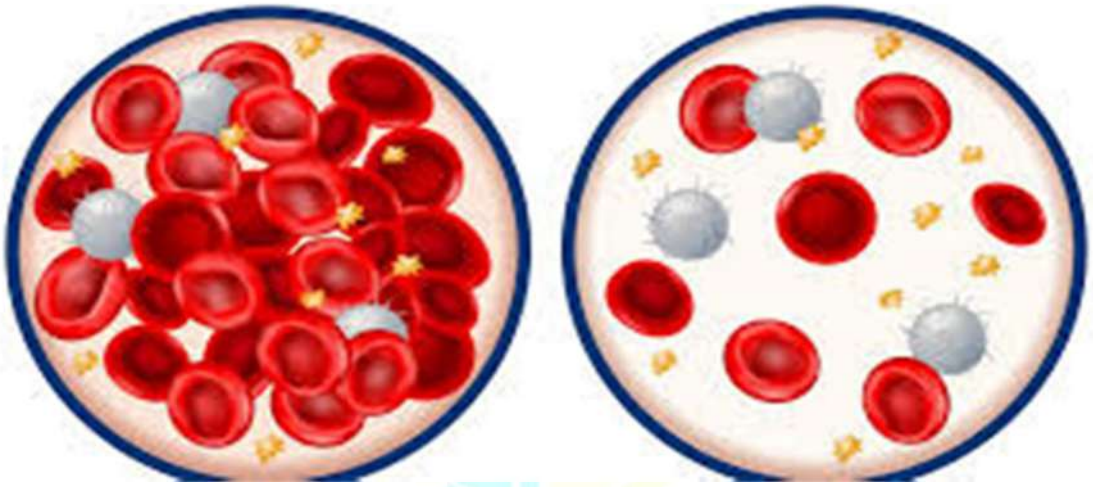
Clinical consideration

- Most common haematological disorder is Anaemia.

FDSPharmacy
Learn and Educate

Iron Deficiency Anaemia (Microcytic Anaemia) M.A

→ A condition in which blood doesn't have enough healthy RBCs is called Anaemia , and if it is due to lack of iron it is called Iron deficiency Anaemia or M.A



Etiology

- Lack of Iron
- lack of iron in diet
- Inability to absorb iron
- Pregnancy (in this condition iron demand increased)
- Genetics
- Heavy blood loss due to any reason

Pathogenesis

lack of Iron in body (due to any reason)

↓

Affected haemoglobine production

↓

Unhealthy RBCs

↓

Iron deficiency Anaemia

Clinical Manifestations

- Weakness
- Extreme Fatigue
- Pale Skin
- Chest pain
- Shortness of Breath
- Increased heart rate
- Headache
- Dizziness
- Brittle nails
- Inflammation in tongue

Non Pharmacological Management

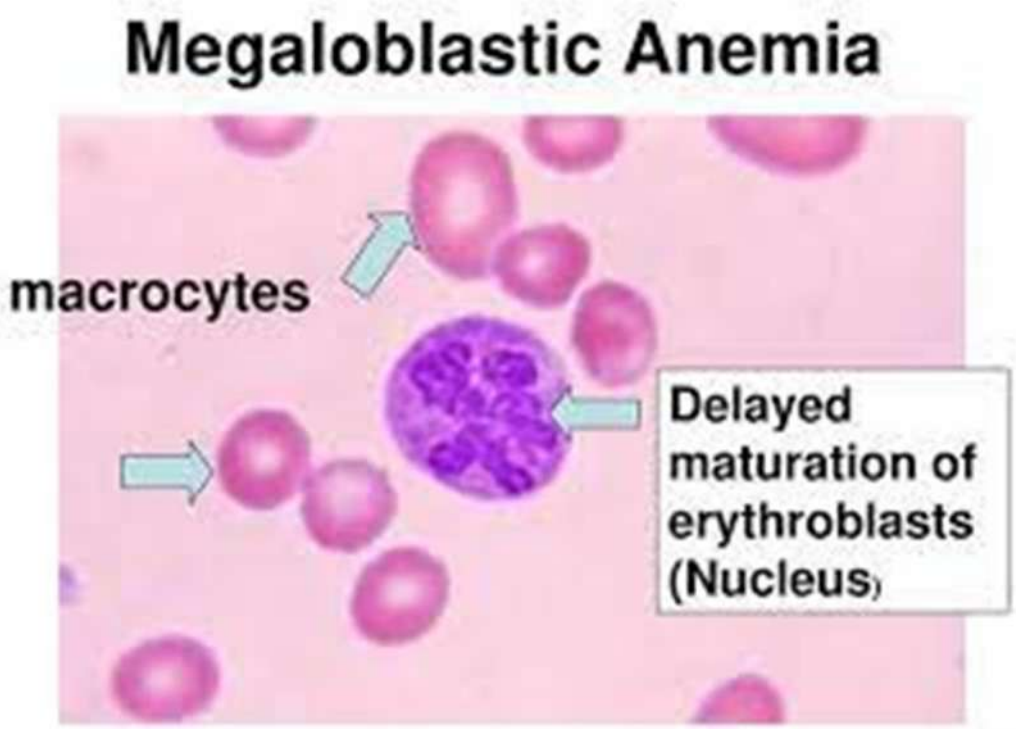
- Increase in diet :
  - Vitamin C
  - Red meat
  - Dark Green leafy vegetables
  - Nuts
  - Dry Fruits
  - Iron fortified Cereals.

Pharmacological Managements

- **Oral iron :** Ferrous sulphate, ferrous aminoate, ferrous gluconate, ferrous succinate, carbonyl iron, iron calcium complex.
- **Parenteral iron :** Iron sucrose, iron dextran, iron isomaltoside, ferric carboxy maltose, ferric pyrophosphate citrate.

Megaloblastic Anaemia

→ Megaloblastic Anaemia is a condition in which Bone marrow makes large structurally abnormal and immature RBCs , Due to lack of Vitamin B 1 2 and B9.



Etiology

- Lake of Folic Acid
- Lack of Cobalamin

Pathogenesis

Blood Formation ↓
lack of Vitamin B12 and B9 ↓
Abnormal Formation of RBCs ↓
Magaloblastic Anaemia

Clinical Manifestations

- Weakness
- Extreme Fatigue
- Pale Skin
- Chest pain
- Shortness of Breath
- Increased heart rate
- headache
- Dizziness
- Diarrhoea
- Loss of appetite

Non Pharmacological Management

- For Vitamin B12 Eggs , red meat , bran , Milk , liver . for Vitamin B 9 liver , kidney , eggs , Dark green Veg.

Pharmacological Management

- **Oral iron :** Ferrous sulphate, ferrous aminoate, ferrous gluconate, ferrous succinate, carbonyl iron, iron calcium complex.
- **Parenteral iron :** Iron sucrose, iron dextran, iron isomaltoside, ferric carboxy maltose, ferric pyrophosphate citrate.
- **Maturation factors :** Hydroxocobalamin, methyl cobalamin, cyanocobalamin, folinic acid/leucovorin.