Aplastic Anemia

Def: It's a Disorder where the bone marrow stops production of blood cells.

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Soft tissue which is responsible for production of all types of blood cells

- RBC → O_2 delivery.
- WBC → fights & Infection
- Platelets → Helps in clotting

In Aplastic Anemia – Bone marrow becomes abnormal.

– Haemopoietic cells are greatly ↓sed or Absent.

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(which produce blood cells)

– Then Haemopoietic cells are replaced by large quantities of fat

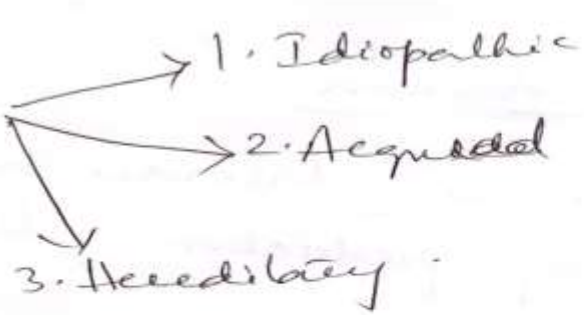
— It involves both males & females of all ages.

young adults b/w 15-30yrs of Age

Elderly > 60yrs

} Have high rates of Aplastic Anemia

Aplastic Anemia



1. 60% of cases are Idiopathic where cause is unknown.

2. Acquired a) Exposed to drugs
   - Anticancer drugs
   - Antibiotics
   - Anti inflammatory agents
   - Epilepsy Medications

   b) Exposed to Radiation

   c) Chemicals like organic solvents — benzene & Pesticides
   - Insecticides

   d) Infection of certain Virus like
   - Epstein Barr
   - Parvovirus
   - HIV

   e) Pregnancy

3. Hereditary in rare : Ex : Fanconi's Anemia.
   - Schwachman Diamond Syndrome.
   - (EXOcrine pancreatic insufficiency, Bone Marrow dysfunction, skeletal Abnormalities

Symptoms of ______ ?

2. W ______ ?

3. Tiny reddish-purple Marks on Skin

4. Evidence of Abnormal bruising

5. bleeding from Gums, Nose, intestines

6. c progression of anemia → H.R ↑sed c appearence of Murmur New ↑ Heart)

Diagnosis 1. Blood count → show Low count of all blood cells.

RBC → Normal in Size & Colour but ↓sed in Number

WBC & Platelets → ↓sed in Number though they are Normal.

2. Bone Marrow Examination → Reveals a very few or No Haemopoietic cells & are replaced by fat.

Treatment : 1. Blood transfusions are done initially

2. Most successful Treatment is B.M Trans-plantation

Donor → often Sibling

↳ To be Identified whether Donor BM is likely to be compatible c pat's Immune - System

(4)-

Otherwise → Donor Marrow will be destroyed

Patients who cannot undergo bone marrow transplant can go for Cyclophosphamide
Cyclosporine
Antithymocyte globulin
Steroids.

Prognosis: It's life threatening illness

without treatment → will progress to

— Pat's treated c̄ b.m transplant → have 60% to 90% chance of being cured.

— 80% of all pat's are treated c̄ B.T alone
They die with in 18 months to 2 yrs

Worst prognosis: is one associated with Very low WBC
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As they have High chance of Death due to bacterial infection

Survival Depends: 1. ON how severe was the disease on Diagnosis
2. which type of treatment is required
3. How the body is responding for treatment

———— x ———— x ————