# Acute non lymphocytic leukemia (ANLL )

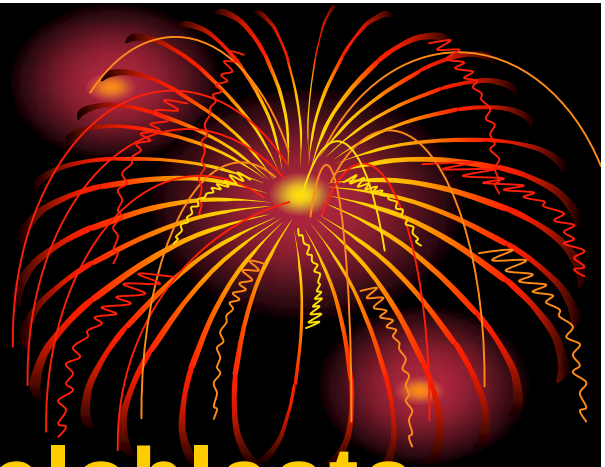
**(Acute myeloid leukemia )**

- **twenty per cent of childhood leukemia , the incidence increase with age**
- **predisposing condition (fanconi anemia , down syndrome , Bloom syndrome)**

# Causes

- *exposure to ionizing radiation
- *exposure  to benzene
- *exposure to alkylating agents

# Pathology



- B.marrow > 30% myeloblasts
- Morphology ;Large blast with low nuclear cytoplasmic ratio , multiple nucleoli and cytoplasmic granules

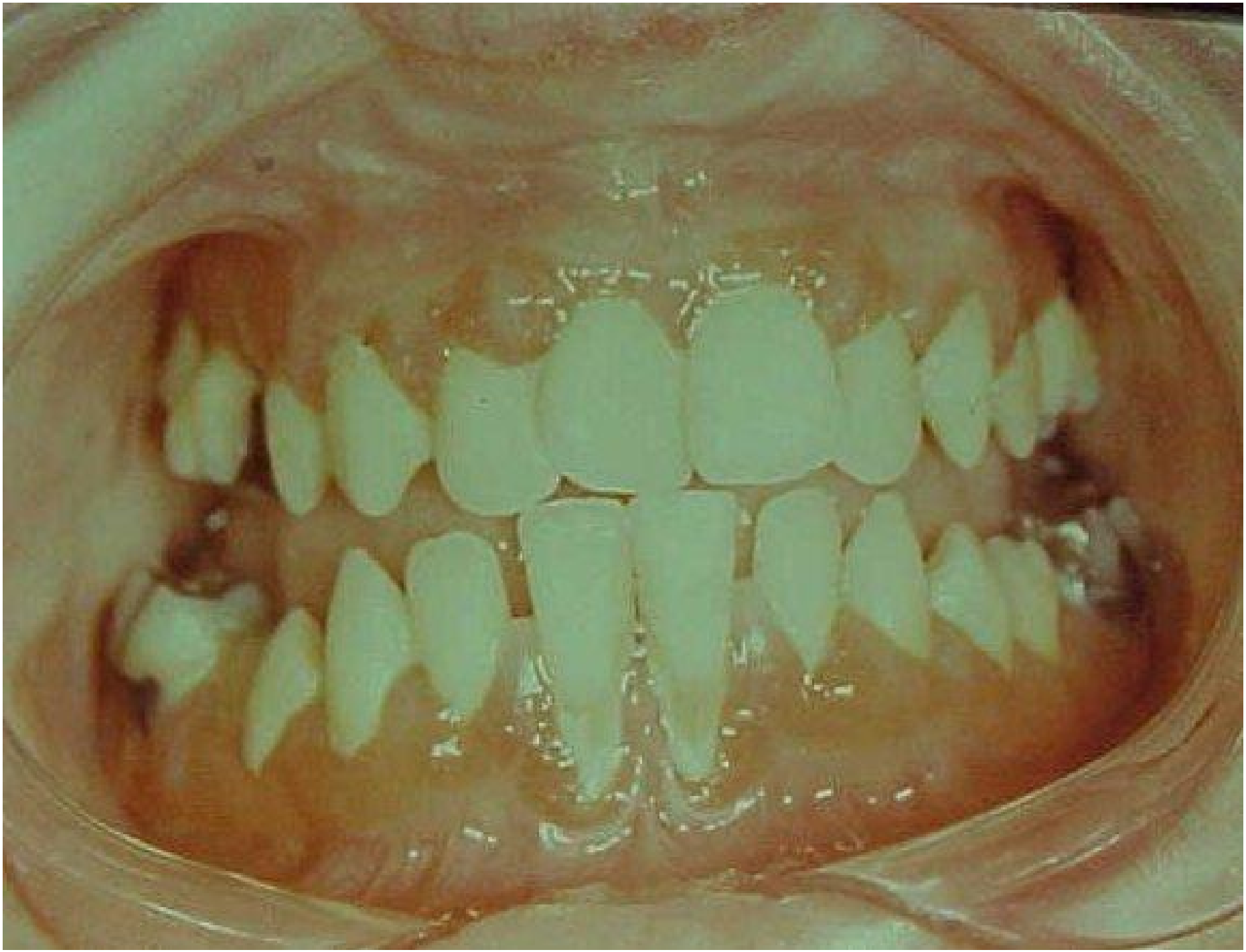
# Clinical manifestations

The symptoms

- similar to those of ALL (fever , pallor , Wt loss , infection , bone pain , bleeding , headache &vomiting

# Physical examination

- *pallor
- *petechiae ,purpura ,
- *Gingival swelling ( local infiltration) specific to ANLL
- *chloromas (leukemic tumor often around the orbit )
- *lymphadenopathy; 25%
- *hepatosplenomegaly .
- * CNS sign



# Diagnosis

- CBC ; anemia ,thrombocytopenia ,WBC. Variable (usually >10,000/mm3)
- peripheral smear; myeloblast may be seen
- Bone marrow aspiration; diagnostic . >30% myeloblast ,(subtype by immunophenotype)
- PT, PTT, &fibrin split products may be increase (M3 )
- Hyperkalemia ,hyperuricemia (tumor lysis syndrome )
- CSF cytology

# Treatment

- AML in general is less responsive to treatment ,more myelosuppresive than ALL therapy
- Induction ; doxorubicine +cytarabine )
- Consolidation
- Intrathecal Cytarabine for CNS prophylaxis
- Duration of therapy 6-9 months
- Allogenic bone marrow transplantation may be the best treatment for AML in 1st remission

# Prognosis

- 85% achieve remission with intensive chemotherapy
- About 30-40 % achieve long term survival