

BURKITT LYMPHOMA

Fastest growing tumor

① African (Endemic)
Burkitt lymphoma

↓
100% EBV associated

② Sporadic (Nonendemic)
Burkitt lymphoma

↓
15-20% EBV associated

③ HIV associated
Burkitt lymphoma

↓
25% EBV associated

Patho :-

* Translocation of MYC gene on chr. 8

(i) $t(8; 14)$ - most common
↓ ↓
MYC IGH

(ii) $t(2; 8)$

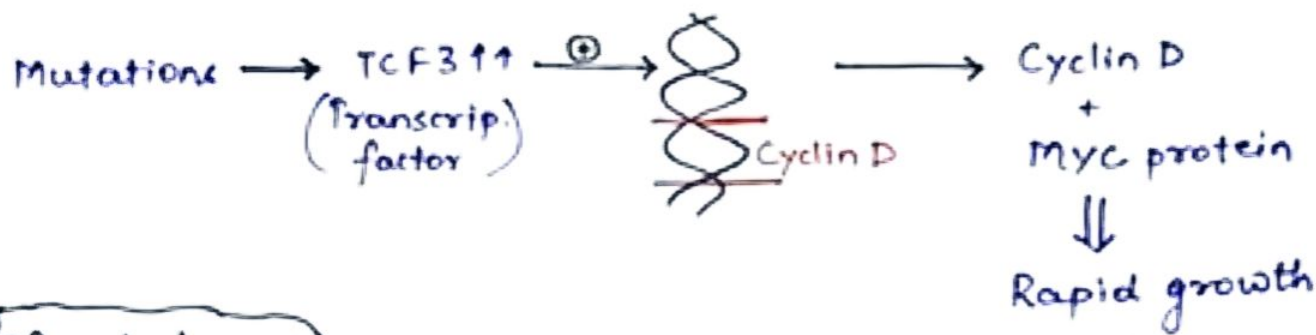
(iii) $t(8; 22)$



MYC protein ↑↑

↓
↑ses expression of genes
req. for aerobic glycolysis

♦ Mutations increasing activity of TCF3



Morphology :- - Extranodal tissue mostly involved.

Tissue involved :-

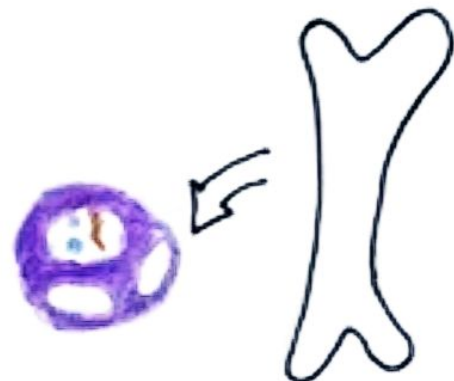
- ① Diffuse effacement by intermediate sized lymphoid cells
 - ② High mitotic index
 - ③ ↑ Apoptotic cells
↓ Phagocytosis by Macrophages
(Abundant clear cytoplasm)
- ⇒ 'STARRY SKY' appearance



Bone marrow involved :-

Tumor cells

- clumped nuclear chromatin
- 2-5 distinct nucleoli
- Royal blue cytoplasm
- clear cytoplasmic vacuoles



Immunophenotyping :-

- CD10
- CD19
- CD20
- IgM
- BCL6 ⊕
- BCL2 ⊖

Clinical features :-

- Mainly children + young adults
- Extranodal tissue mostly involved.



- Mass involving mandible {mainly}
- Kidneys, adrenals
- ovaries



- Mass involving
 - peritoneum
 - ileocecum

HIV

associated



can occur anywhere.