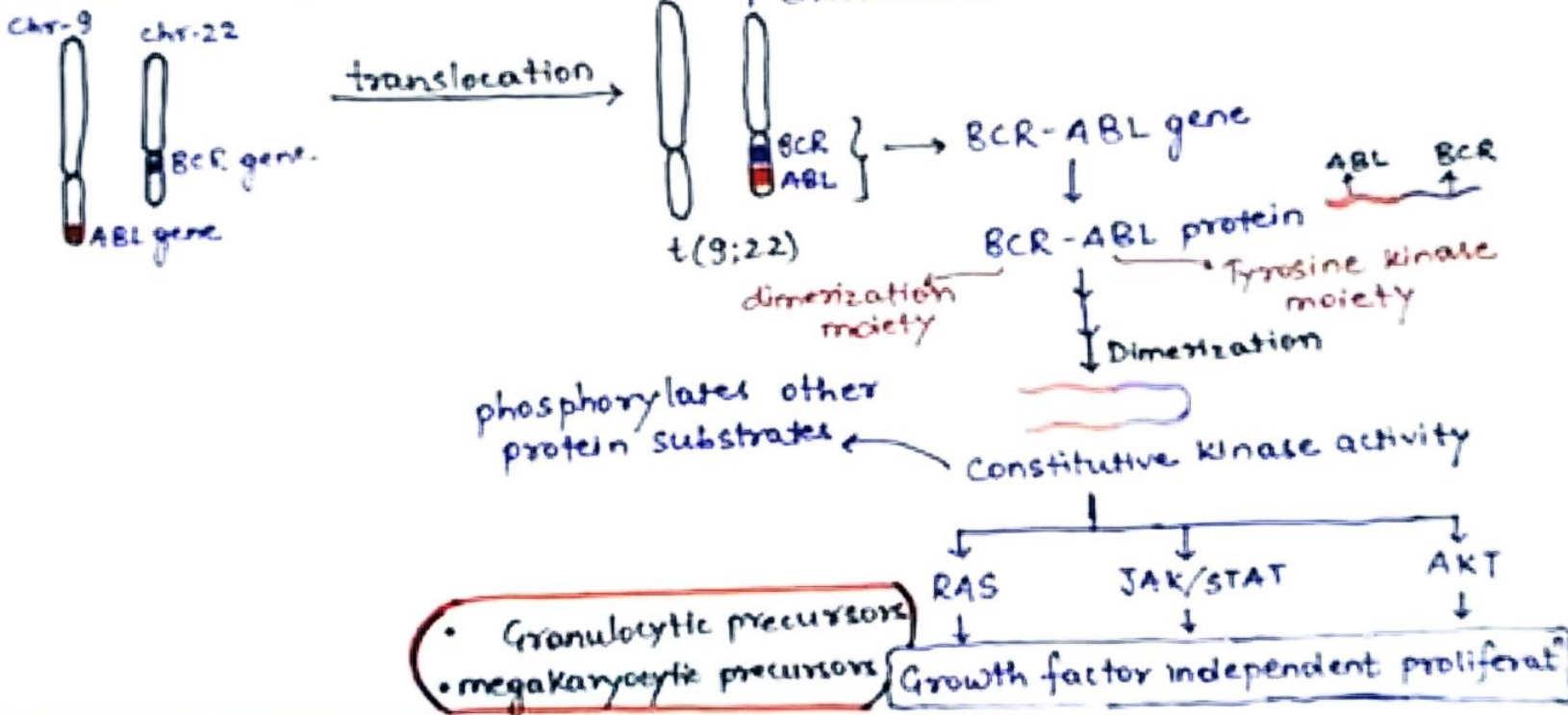


CML (Chronic Myeloid Leukemia)

Excessive proliferation of precursors in myeloid lineage over a long pd. of time.

{ granulocytic precursors
megakaryocytic precursors }

Pathogenesis :-



CML - Natural Hx of disease → Slow progression

↓ progresses (~ 3yrs)

CML - 'Accelerated phase'

↓ progress

+ Cytogenic abnormalities

- Duplication of Philadelphia chromosome
- Trisomy 8
- Isochromosome 17q

"BLAST CRISIS"

→ Resembles Acute leukemia

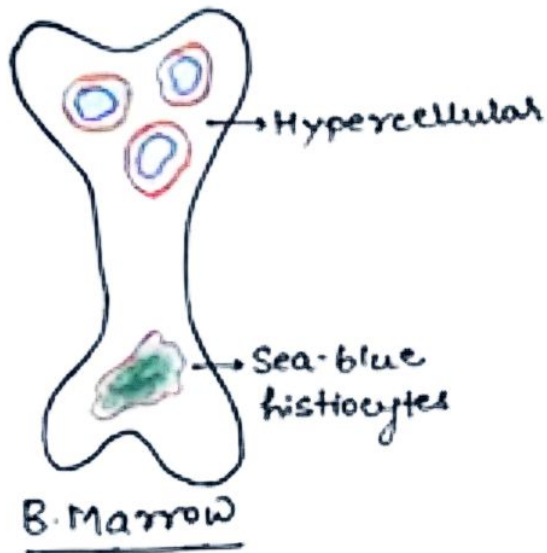
→ may be

- myeloid blast crisis
- Lymphoid blast crisis

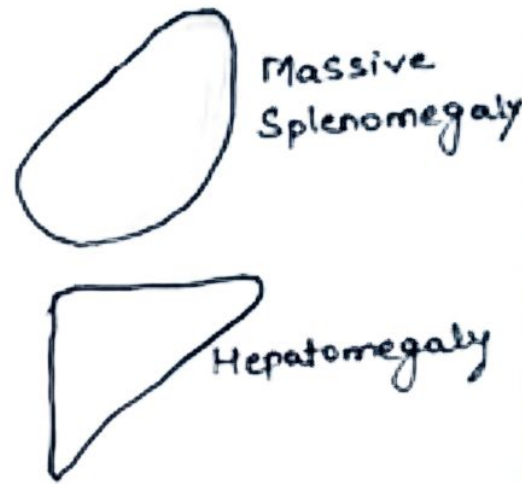
∴ Evidence :-

- CML originates from pluripotent stem cell of both myeloid & lymphoid potential.

Morphology :-



- Leucocytosis ($>100,000$ cells/ mm^3)
 - Neutrophils
 - Eosino-
 - Baso-
 - Myelocyte
 - Metamyelocyte



D/A extensive extramedullary hematopoiesis
 ↓
 Massive splenomegaly

- 1) Hypercellular
 - Granulocytic precursor
 - Megakaryocytic precursor

2) Sea-Blue Histiocytes
 ↓
 Scattered macrophages
 & abundant wrinkled green-blue cytoplasm

Clinical features :-

- Adult
- Onset → Insidious

- Anemia
- Weakness
- Fatigue

- Anorexia
- Wt. loss

- Splenomegaly^{**}
- [dragging sensation in abdomen]

- Natural Hx of disease (Above symptoms)

↓
Accelerated phase. [• ↑↑ Anemia
• ↑ Thrombocytopenia]

↓
Blast crisis [Resembles Acute leukemia]