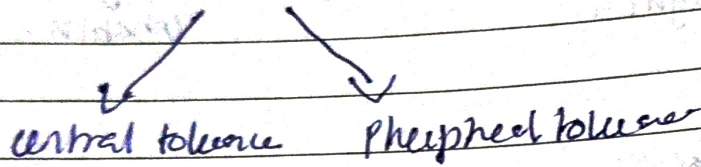


AUTOIMMUNITY

→ It is condition in which the body's own immunologically competent cell or Antibody Act against its self Antigens.

IMMUNE TOLERANCE:

state in which individual is capable of developing immune Response Against his own tissue Antigens.



central tolerance occurs during the development of immune cell in 1st lymphoid organ.

Thymus - T cell, BM - B cell.

If Any self Reactive T or B lymphocyte present, deletion occurs.

Peripheral tolerance: Backup Mechanism that due to counteract the self Reaction cells that escape central tolerance.

Key Mechanism:

Tolerance

Key: When self Reactive T cell interact with APC → self Antigen signal is

Ab → Contract inhibitory signal blocked or BT molecules

on APC bind to CTLA-4 molecules on T cells
instead of CD28 molecules.

receptor

Mechanism of Autoimmunity:

↓
Due to breakdown of Tg Tolerance

→ Breakdown of T cell Anergy: →

↑ Immunity Against self Antigen is suppressed
 ∴ There is breakdown of T cell Anergy

→ They Act Against self Antigen

→ RA, Multiple sclerosis, Rheumatoid.

② Failure of AICD: Activates induced cell death:

when T cell Anergy
 ↓ In host

Induces Apoptosis → AICD (demonstrated)

A.P

③ Loss of Treg cells: suppress the Activity of T cells:

④ Release of sequestered Antigen:

(children) → organ which do not have blood have Antigen

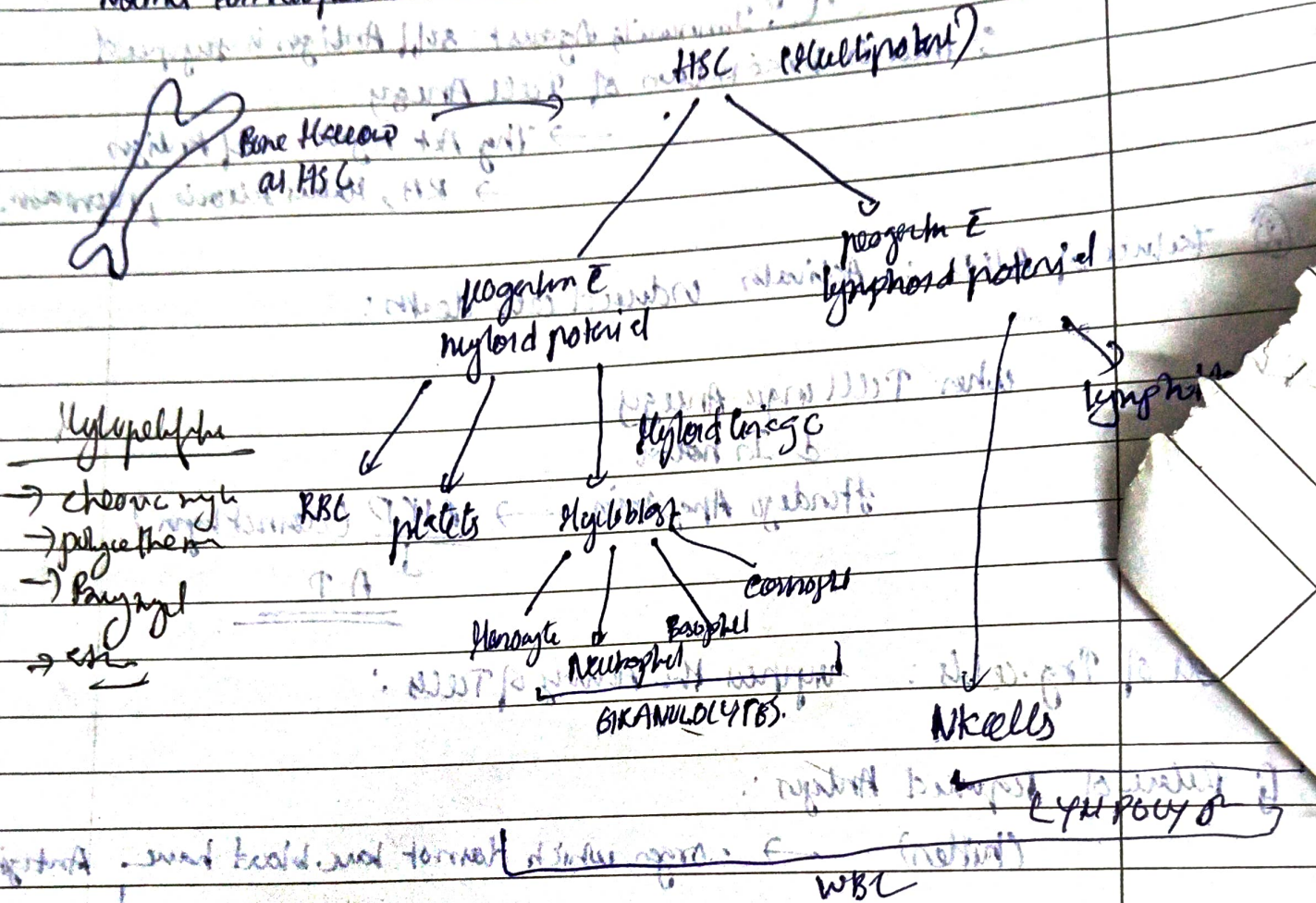
↓
 These Antigen are protected from APC (T cells, macrophages)

⑤ Molecular Mimicry →

because of similarity in structure of self and non self antigens
 ↓
 self antigens are mistaken for non self antigens

Noemel Hemiklopaesie

Pine Hollow
at HSL



Lymphoid Neoplasm } $\rightarrow$ Neoplastic disorder
Myeloid Neoplasm }

5) Abnormal rectification of cells involved in development of lymphoid tissue

Leukemia or lymphoma $\rightarrow$ Histo the patient present
 $\downarrow$ $\rightarrow$ dense mass in lymph node
 immunocytology
 BM