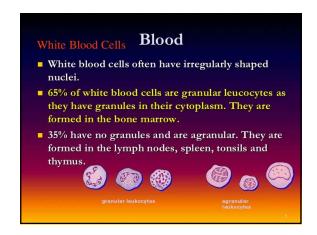
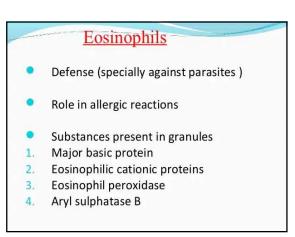
Common myeloid progenitor



TYPES OF LEUKOCYTES Granulocytes Granules in their cytoplasm can be stained Biologically active substances involved in inflammatory and allergic reactions. Neutrophils, Eosinophil, and Basophils



Eosinophils (0.04-0.4 x 10⁹/L) • Eosinophils- Functions: • They migrate to the site of infection. • Weak phagocytes. • Antiparasitic (kills parasites including worms). • Contains histaminase – and so it reduces allergic reaction. • Eosinophilia – increased level of eosinophils in the blood.



Neutrophils

Comprises approximately 60% of the peripheral bl leukocytes, neutrophils are the most numer leukocyte population.

- Neutrophils have multi lobed nuclei (2-5) and cytoplasmic granule stain with both acid and basic dyes.
- often called polymorphonuclear cells (PMN's).

The neutrophil's main role is in inflammation.

- First to arrive at inflammation site
- Leave blood/endothelium into tissue (extravasation).

Neutrophils are attracted in factors stimulated by tissue

- complement proteins, clotting

protoins and T call derived

Introduction

- Mast cells are primary effector cells in immunoglobulin E (IgE) mediated inflammatory reactions.
- · They are implicated in:-
 - both acquired and innate immune responses,
 - wound healing,
 - fibrosis,
 - angiogenesis, and
 - autoimmune diseases

Mast cell distribution and identity

- Mast cells are widely distributed, long lived cells found predominately in connective and mucosal tissues and often in proximity to blood vessels, nerves, and lymphatic tissues.
- Mast cells are abundant in the skin, respiratory tract, gastrointestinal tract, and genitourinary tract.
- 7000 mast cells/cubic mm in normal skin.