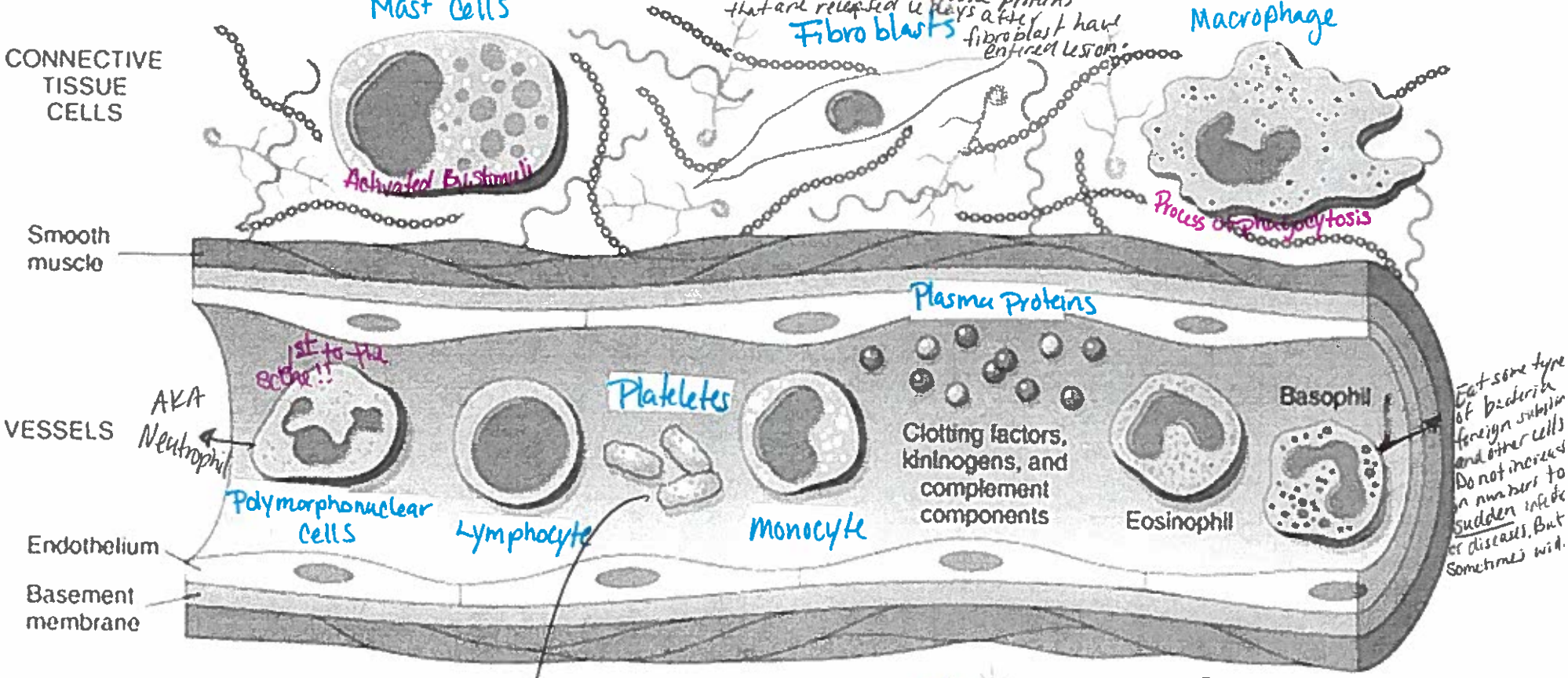
Explain the process of inflammation for each structure below.



Eat some type of bacteria foreign substa and other cells Do not increase in numbers to sudden infec er diseases. But Sometimes wid

absent from the scarring rocess, are synthesized y fibrocytes, and are pable of extension to almost nice their length at rest. ve skin the property to eturning to its original hape.

Fibroblasts

Elastic fibers

Collagen fibers

Most abundant protein in the body. Containing high concentrations of amino Acids glycine, proline, and Lysine. In order to make collagen + amino acids, Iron, ascorbic Acid (vit C), and oxygen are needed. (molecular)

Extracellular Matrix Proteins

Proteoglycans

Provides hydration and swelling pressure to the tissue, enabling it to withstand compressional forces. may have functions regulating collagen formation and growth factors.

ka thrombocytes - Circulate the blood ream until vascular injury occurs, a are activated by many products of nate + adaptive immune responses. Initiate An coagulation responses to stop bleeding nd degranulation → growth factors of tissue.

Polymorphonuclear Neutrophil - (AKa Neutrophil) - predominant phagocytes in early Inflammatory site arriving within 6 to 12 hours after the initial injury where they phagocytose Bacteria, dead cells, and cellular debris. Are replaced after 24 hrs by Macrophage and lymphocytes. Cannot survive and divide in the inflamatory site. Short lived and component of purulent exudate or pus. Produce platelets

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Monocytes - Largest normal blood cells (14 to 20 um in diameter), have a nucleus that is often indented or horseshoe shaped. Produced in the bone marrow, enter the circulation (blood stream) and migrate to the inflammatory site where they develope into macrophages. (Produce Platelets)

Macrophages - Generally larger blood cells (20 to 40 um) and are more active as phagocytes than monocytes. Are monocyte derrived and appear at inflammatory site as soon as 24 hours after the initial Nutrophil infitration, but usually arrive in 3 to 7 days, later. Migrate more slowly than Neutrophils, because neutrophyls must release chemotactic factors that attract macrophages to the site. Better suited than neutrophils in long term defense against infectious agents because they can survive + divide in the acidic inflamatory site where there is low oxygen tension

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Eosinophils - Mildly phagocytic and have no specific functions, serve as body's primary defense against parasites + help regulate vascular mediators released from mast cells. Resistance to parasites is due to collaboration with specific antibodys produced by aquired immune system.
2nd function: Regulation of mast cell derrived inflamatory mediators.

Mast Cells: Granulocytes that release histamine when injured, found in large numbers in areas exposed to the environment. Stimuli cause mast cells to become activated and initiate the immune response. Mast cells begin new synthesis of other mediators of inflammation, as well as factors that stimulate cell growth and angiogenisis. - blood vessel formation

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Lymphocytes - Cells of the immune system that kill and recognize molecules by its specific Antigen. Tcells come from Thymus and Bcells come from Bone marrow.