

Chapter 1. Lidocaine – A topical analgesic that can reduce inflammation and pain. Introduction to Inflammatory Diseases and Machine Learning Approaches 8 Figure 1.5: Purulent Inflammation 1.2.4.4 Serous Inflammation: Characterized by the excessive accumulation of non-viscous fluid, typically produced by epithelial cells lining serous membranes or derived from blood plasma. These categories cover a wide range of triggers that can lead to an inflammatory response in the body. [Cot20] 1.2.4 Inflammation patterns Specific patterns of acute and chronic inflammation emerge in various conditions affecting the body, such as superficial infections or bacterial-induced inflammation. Introduction to Inflammatory Diseases and Machine Learning Approaches 7 1.2.4.2 Fibrinous Inflammation: This occurs when there is a significant increase in vascular permeability, allowing fibrin to escape from the bloodstream. [VK17] 1.2.4.1 Granulomatous Inflammation: This type is characterized by the formation of granulomas, which develop in response to certain diseases, including tuberculosis, leprosy, sarcoidosis, and syphilis. The figure 1.4 represents Fibrinous Inflammation Figure 1.4: Fibrinous Inflammation 1.2.4.3 Purulent Inflammation: Marked by the production of large amounts of pus, this type of inflammation consists of neutrophils, dead cells, and fluid. The figure 1.6 represents Serous Inflammation Figure 1.6: Serous Inflammation 1.2.4.5 Ulcerative Inflammation: When inflammation occurs near an epithelial surface, it can lead to necrotic tissue loss, exposing deeper layers. Biologic Agents: These are newer medications that specifically target inflammatory pathways in diseases like rheumatoid arthritis, psoriasis, or Crohn's disease. Other Anti-inflammatory Medications: o Colchicine – Primarily used for gout, it reduces inflammation associated with uric acid crystals. This type of inflammation is commonly found in serous cavities, where fibrin deposits can eventually lead to scarring between serous membranes, restricting their function. o Fatigue and/or insomnia. 2.3.4. 1.2.2.3.4.2.4.5.