ACUTE INFLAMMATION

Reading Assignment: Basic Pathology (Kumar, Abbas & Aster) 10th Edition, Chapter 3, pp. 57-81.
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KEY CONCEPTS AND LEARNING OBJECTIVES:

A. EDUCATIONAL GOALS

1. Understand acute inflammation as a protective response to injury and an initiator of tissue repair.

2. Understand inflammation as a complex process that is composed of multiple components.

3. Correlate the pathophysiology of inflammation with clinical signs of inflammation

B. EDUCATIONAL OBJECTIVES (Both this and next lecture)

1. Define the following terms: (Independent Study):
   Inflammation, Exudate, Transudate, Pus, Diapedesis, Granuloma, Lymphangiitis, Lymphadenitis, Abscess, Cellulitis, Chemotaxis, Leukocytosis, “Shift to the left”, Leukemoid reaction, Leukopenia, Lymphocytosis, Lymphopenia, Neutrophilia, Neutropenia

2. Compare and contrast the general features and characteristics of acute and chronic inflammation (next lecture). Using these characteristics, determine if a clinical condition is acute or chronic inflammation.

3. Identify and explain the characteristic vascular and white cell events of acute inflammation. Correlate these events with the clinical manifestations of acute inflammation.

4. Identify the general categories of inflammatory mediators, and briefly explain their relationship and characteristics.

5. Be prepared to use your knowledge of the molecular/cellular events of acute inflammation to explain the features of clinical cases with acute inflammation.

6. Predict the consequences of a congenital or acquired deficiency of one or more steps of the acute inflammatory process. Examples:
   a. Congenital defect in the formation of the cytoskeletal system of neutrophils
   b. Congenital defect in NADPH oxidase
   c. Impaired circulation to tissue contaminated by bacteria