Module B: Effects of the Inflammatory and Immune System in Response to Pathophysiological Processes

1. Statement of Purpose

   The body's most uniform reaction to disease or injury is inflammation. Frequently this is followed by transient or permanent immunity. It is important that the nurse be able to recognize the difference between wellness and disease processes and to provide nursing care accordingly.

2. Terminology

   | Serous | Autoimmune |
   | Purulent | Antigen |
   | Fibrinous | Antibody |
   | Catarrhal | Immunoglobulins |
   | Leukocytosis | Immunity (active, passive) |
   | Allergy | Interferon |
   | Anaphylaxis | Allergen |
   | HLA system | Hypersensitivities |
   | Desensitization | Immunodeficiency |
   | | Immunosuppression |
   | | HIV |
   | | SLE |

3. Classroom Objectives

   3.1 a. Identify major concepts of the biological defense system including specific and nonspecific mechanisms.
   b. Explain the steps in the inflammatory process, containment of infection, and inflammatory resolution.
   c. Explain the normal immune response and differentiate between cellular and humoral immunity.
   d. Discuss the concept of immuno suppression and the role of the nurse in caring for the immuno suppressed patient.
   e. Identify common immune disorders associated with impaired immune responses experienced by the adult and child.
   f. Discuss the nurse's role in providing health teaching in regard to immunizations, and for immunity-related problems.
   g. Identify common pharmaceutical agents used for providing immunity.
   h. Explain the principles of infection control instituted for the protection of the patient, self, and others.

3.2 Learning Activities
a. Know terminology
b. Review anatomy and physiology (Immune System)
c. Discuss, in class, the role of the immune system in anaphylaxis, autoimmune disease, graft rejection, and delayed hypersensitivity.
d. Identify, in class, the five cardinal signs of inflammation and describe local and systemic manifestations of inflammation.
e. Review assigned computer programs, A-V materials and journal articles.

3.3 References
a. Current texts

4. Clinical Objectives
a. Complete a nursing care plan for the patient with a problem related to impaired immune response.
b. Complete a nursing care plan for a patient receiving steroid therapy.
c. When possible, care for a patient using isolation precautions recommended by CDC guidelines.
d. Demonstrate application of the principles of infection control for the protection of the patient, self, and others.

5. Skills Laboratory Requirements
a. Review - CPR
b. Review - Isolation Procedures
c. Review - Medical-Surgical Asepsis
d. I.V. site care

Review
1) Regulation of flow rates
2) Discontinuing I.V.'s
3) Stripping of I.V. solutions
4) I.V. drop rate calculations and monitoring

References
Current texts

*** Not required of the VN student.