PNEUMONIAS

I. TYPICAL PNEUMONIAS

A. SYMPTOMS
1. OFTEN PRECEDED BY URTI OR SECONDARY TO INFLUENZA OR OTHER VIRAL URTI
2. ACUTE DISEASE WITH RAPID ONSET
3. SEVERE CHEST PAIN
4. PRODUCTIVE COUGH
5. SYSTEMIC SYMPTOMS
   a. HIGH FEVER
   b. MYALGIAS
   c. HEADACHE
   d. NAUSEA

B. PATHOLOGY
1. CLASSIC INFLAMMATORY RESPONSE
   a. PMNs AND MONOCYTES
   b. PHAGOCYTOSIS
   c. ALVEOLAR MACROPHAGE
   d. RESOLUTION OR
2. SPREADING LESION
3. FLUID ACCUMULATION--CONSOLIDATION
4. PENETRATION--PLEURISY (EMPYEMA) & BACTEREMIA

C. AGENTS
1. STREPTOCOCCUS PNEUMONIAE
   a. PRIMARY TYPICAL PNEUMONIA
   b. MOST COMMON
   c. COMPLICATIONS ARE COMMON
   d. 20% MORTALITY
2. STAPHYLOCOCCUS AUREUS
3. STREPTOCOCCUS PYOGENES (GROUP A STREP)
4. HEMOPHILUS INFLUENZAE TYPE b
5. NEISSERIA MENINGITIDIS
6. KLEBSIELLA PNEUMONIAE (PLUS OTHER ENTERICS)
   a. NOSOCOMIAL INFECTIONS
   b. DEBILITATED, ELDERLY MEN
7. PSEUDOMONAS AERUGINOSA
   a. NOSOCOMIAL (ESP. IN CF PATIENTS)
   b. BLUE PUS
II. ATYPICAL PNEUMONIAS
   A. SYMPTOMS
      1. INSIDIOUS ONSET
      2. NONPRODUCTIVE COUGH IS FIRST SYMPTOM
      3. FEVER DEVELOPS WITH:
         a. HEADACHE
         b. CHILLS
         c. MALAISE
         d. CHEST PAIN
         e. GENERAL MYALGIA
      4. RECOVERY IS USUALLY COMPLETE WITHIN 14 DAYS
      5. USUALLY FEW COMPLICATIONS
      6. MORTALITY USUALLY LESS THAN 1%
   B. PATHOLOGY
      1. USUALLY INVOLVES INTRACELLULAR GROWTH
      2. OFTEN INFECTED MONOCYTES AND MACROPHAGE
      3. CELL-MEDIATED IMMUNITY--LESS INFLAMMATION
   C. AGENTS
      1. MYCOPLASMA PNEUMONIAE
         a. PRIMARY ATYPICAL PNEUMONIA
         b. GROW EXTRACELLULARLY, BUT ATTACHED
         c. SPECIFIC ADHESINS IN "TIP-LIKE" STRUCTURE
      2. LEGIONELLA SPP.
         a. LEGIONNAIRE'S DISEASE--LEGIONELLOSIS
         b. TRANSMITTED BY WATER AEROSOLS
         c. OFTEN HIGH MORTALITY RATE
         d. ALSO CAUSES PONTIAC FEVER
      3. CHLAMYDIA PSITTACI
         a. PARROT FEVER, ORNITHOSIS, PSITTACOSIS
         b. OBLIGATE INTRACELLULAR PARASITE
         c. CARRIED BY NEARLY ALL BIRDS
         d. EARLIEST EPIDEMICS HAD VERY HIGH MORTALITY
      4. COXIELLA BURNETII
         a. Q FEVER--RICKETTSIAL-LIKE DISEASE
         b. NO ARTHROPOD VECTOR
         c. CATTLE/SHEEP <---> TICKS (VECTOR)
         d. TRANSMITTED IN DUST OF STOCKYARDS

III. OTHERS
   A. TUBERCULOSIS
   B. PNEUMOCYSTIS PNEUMONIA