

# 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