## XVI. Diseases of the Respiratory System

### I. Acute Specific

***(a) Bacterial***

1. Pneumococcus
2. Streptococcus haemolyticus
3. Staphylococcus aureus
4. Friedlander's bacillus
5. Mycobacterium tuberculosis
6. B. influenza
7. B. anthracis (wool sorters disease)
8. Pasteurella pestis (pneumonic plague)
9. Pasteurella tularense

***(b) Associated with virus diseases***

1. Influenza (virus + bacteria)
2. Measles (virus + bacteria)

***(c)Viral***

1. Psittacosis-ornithosis group
2. Unidentified pneumonotropic
3. Viruses of recognized acute specific diseases.

***(d) Rickettsial***

1. R. burneti (Q-fever)

***(e) Fungal***

1. Coccidioides immitis
2. Blastomyces dermatitidis
3. Histoplasma capsulatum

***(f) Spirochetal***

1. Syphilis
2. Leptospira ictero-haemorrhagica
3. Vincent's spirochetes

***(g) Chemical***

1. Lung irritant gases
2. Lipoids

***(h)Allergic***

1. Loeffler's syndrome
2. Eosinophilic-lung
3. Peri-arteritis nodosa
4. Rheumatic and collagen of the lung diseases

### II. Aspiration Pneumonias

***(a) Diffuse: Synonyms: Broncho-pneumonia***

**Varieties:**

1. Post-operative
2. Hypostatic
3. Terminal
4. Post-bronchitis
5. Deglutition
6. Inhalation

***(b) Localized: Synonyms:***

1. Infected segmental atelectasis
2. Pneumonitis

***(c) Suppurative: Synonyms:***

1. Suppurative pneumonitis
2. Necro-suppurative bronco pneumonia
3. Lung abscess (most types)

### III. Other Types of Pneumonias

**(a) Helminthic infection :**

1. Paragonimus
2. Bilharzia
3. Ascaris
4. Ancylostoma
5. Filaria
6. Cysticercus cellularis
7. Ecchinococcus granulosus

**(b) Protozoa :**

1. Leishmaniasis
2. Kala-azar
3. Amoebiasis

**(c) Plasmodial:**

1. P. falciparum (malignant tertiary malaria)

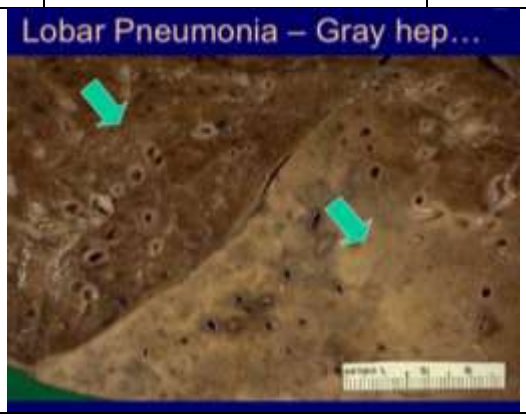
**N.B. 2**

- The red stage of hepatization of the lung **(pneumonic consolidation)** follows the **stage of congestion** and **precedes the stage of grey hepatization.**
- However, usually no sharp line exists between the stages; that is, more than one stage may be present at the same time in different portions of the affected lung (overlapping of stages).
- **The red stage** of lobar pneumonia usually starts at about the end of the second day.
- The affected parts, instead of containing air, they contain the acute inflammatory exudate.
- Hence if a small piece of a **pneumonic lung is cut, it can be shown to sink in water.**

*Figure* 79
*Nature* **Lobar Pneumonia**
*Specimen No.* II-6.3121
*Reference P.* 173

*Figure*80
*Nature* **Lobar pneumonia (grey stage)**
*Specimen No.* II-6.3122
*Reference P.* 174

*Figure* 81
*Nature* **Bronchopneumonia (acute; confluent)**
*Specimen No.* II-6.3142
*Reference P.* 177



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|---|---|---|---|---|
| **Lobar Pneumonia (grey stage)** | | | **II-6. 3122** | |
| ***Lung:*** | Is enlarged<br>Swollen<br>Uniformly-consolidated<br>Diffusely-affected throughout<br>Is hepatized instead of being spongy in appearance | | | |
| | ***Cut surface:*** | Consolidated<br>Moist appearance<br>Granular (resembles grey granite)<br>Pinkish-grey | | |
| | ***Consistence:*** | Firm (sharp borders), but softer than in the red stage | | |
| | ***On section:*** | Finely granular<br>Moist (softening of the exudate)<br>A sticky semi-purulent fluid (containing fine granules of fibrin) exudes, from alveoli and can be scraped | | |
| ***Bronchi*** | Congested<br>Excess of secretion | | | |
| ***Pleura*** | Pale greyish-whitish-yellow<br>Dull over the affected lobes<br>Opaque | | | |
| ***Lymph nodes (hilar) :*** | Enlarged<br>Slightly anthracotic | | | |