

## Lecture No fourteen

### Mycoplasmas

Mycoplasma are group of small, wall less organisms, of which M.pneumonia is the major pathogens. M.pneumonia on artificial media caused typical pneumonia

#### important properties

Are smallest free living organism. Their most striking features is the absence of cell wall. M stain poorly with Grams stain, and antibiotic that inhibit cell wall synthesis, e.g penicillin and cephalosporin, are ineffective. There is the only bacterial M contains cholesterol, a sterol found in eukaryotic cell membrane. M can be grown in the laboratory on artificial media, but they have complex nutritional requirements including several lipids.

They grow slowly and require at least 1 week to form visible colony. The colony has characteristic fried egg shape, with a raised center and a thin outer edge.

#### L.D

Diagnosis is not made by culturing sputum sample. It takes at least 1 week for colonies to appear on special media. Serologic testing is the mainstay of diagnosis. A cold agglutination of 1:128 or higher is indicative of recent infection.

#### Treatment

#### Erythromycin