

## Lecture no Twelve

### Rickettsia

The Rickettsia are group of organisms that infect wild animals , with humans acting as accidental hosts in most cases. Most of these organisms are passed between animals by an insect vector. All Rickettsia serologically . I

### Symptoms

Fever,headach,and rash.

All rickettsia are pleomorphic Gram negative coccobacilli. The organisms multiply by binary fission in the cytoplasm of host cell, which are finally lysed during release rickettsia.

Early diagnosis is made on clinical ground based on the symptoms of fever, rash and exposure to ticks. The characteristic spread rash from the extremities to the trunk help to distinguish Rocky mountain spotted fever (RMSF).from meningococemia.

L.D.

Biopsy specimens of skin tissue from the rash of RMSF can be stained directly with aspecific edimmunoflourescence reagent. The Giemenez stain is also used for examination of clinical material. byAlthough the rickettsia can be cultured in embryonated egg and in tissue culture. Diagnosis is primarily accomplished serologically.

The test is Weil felix reaction ,the fortuitious agglutination of certain strains of *Proteus vulgaris* by serum from patients of which M with Rickettsial disease.