

8. Rabies

Rabies is a Zoonotic disease – acquired from infected animals which are reservoirs. Rabies is a lethal form of encephalitis. It spreads via the bite of infected dogs.

Clinical feature: **Incubation period is 4 – 12 weeks**, if bite is on head/neck- shorter

Rabies virus spreads from wound to CNS via nerves.

Symptoms: initially nonspecific, often early psychological.



There are 2 forms of Rabies; Furious and dumb.

1. **Furious Rabies:** more common, muscular contractions, tremors, excitement, convulsions and **hydrophobia**.
2. Dumb rabies: paralytic rabies, ascending paralysis, swallowing, speech & respiration.

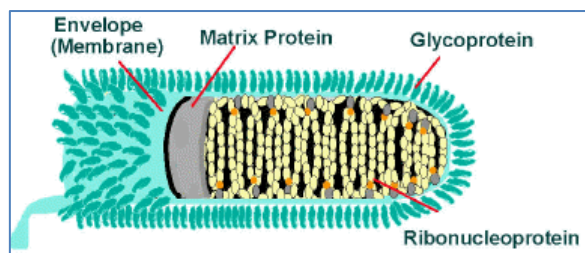
Rabies virus is present in saliva, skin and eyes as well as brain.

Prognosis: disease is always fatal. Death follows convulsions.

Pathology: intracytoplasmic inclusions within neurons known as **Negri bodies** are diagnostic of Rabies.

Epidemiology: Rabies infects dogs, cats, foxes, wolves, etc.

Post exposure vaccine is helpful for prevention.



Virology: Rabies virus is a lyssa virus within the Rhabdovirus family.

SS RNA, bullet shaped, enveloped helical virus.

Diagnosis: Direct demonstration of virus, **Negri bodies in brain cells, RNA PCR (Polymerase Chain Reaction). **Post mortem Sellers staining for Negri body staining****

Vaccination: Rabies vaccine 1st developed by **Louise Pasteur**.

All vaccines prepared for humans contain inactivated viruses.
