

RABIE.

Etiology :

Rhabdo virus
(genus **Lyssa virus**).

- 1-source of infection is always an **infected animals** .
- 2-method of spread **is by the bite of an infected animal** .
- 3-contamination of skin wound **by fresh saliva** ..
- 4- **inhalation** as a route of infection came under suspicion. itis now accepted that inter bat spread and from bat to other species by bite.
- 5-**ingestion** of V. lead to infection .
- 6-dog and minor extent cat ,considered to be main source animal, foxes ,skunks, wolves, coyotes, vampire, insectivorous and fruit-eating bat and raccoons .

Pathogenesis :

- After Biting the .V. multiplication occur in **striated muscle cell** the second tissue which provide an important site of virus entry in to the nervous system .
- the V. may entry to nervous system **at motor end plate**, following entry of V. in to CNS. nerve in spinal cord an ascending wave of neuronal infection and **neuronal dysfunction occur** .
 - the incubation period varies to a large extent with the site of bite .

Clinical Finding :

Among farm animals cattle are more common affected , incubation period **3 weeks** but varies from **3 weeks to several month** in most species (5-6 month in cattle and dog).

Paralytic form :

- knuckling of the hind fetlocks ,swaying of hind quarters while walking .
- division of the tail to one side ,early sign.

- decrease sensation ,weakness ,tenesmus, with paralysis of the anus ,resulting in the sucking in and blowing out of air usually occurs late in the incoordination stage .
- drooling of saliva
- paralysis the animal goes down and is unable to rise
- death occurs of 6-7 days

2-Furious Rabies :

- the animal tense, alert appearance, hypersensitive to sound and movement .
- in some case they will violently attack other animal or inanimate object ,sever signs may be evident for 24-48 hr.
- body temperature are usually normal but may elevated ,
- some animal don't eat or drink, inability to swallow .

Clinical Pathology :

- no antemortem laboratory examination has proved to be of diagnostic value .
- serological test
- histological search for **Negri bodies in tissue section** resulting a viable in **48hr** .

Differential Diagnosis :

1-acute and subacute lead poisoning

2-Lactation tetany and

3-a vitamiosis A.

4-Polioencephalomalacia .

5-Listeriosis .

6-Enterotoxemia (sheep)

7-Pregnancy toxemia

8-Loping ill .

Treatment :

1 -Irrigation of the wound with 20% **soft soap solution** (Establishment of infection)

2-**Euthanasia** of suspected animal

3-Antirabies serum may become available .

Control :

- reduction of human rabies
- vaccination of animal and prevention of exposure.
- destruction of **wild fauna** ,muzzling and vaccination of all cats ,dogs and keeping farm animal indoor .
- both **inactivated and attenuated live virus vaccine** ,but only attenuated ones are acceptable
- High egg passage (**HEP**),chiken emberyo
- the field duration of immunity with **ERA** vaccine is 3 years in cattle and 2 years in horse and dogs .
- calves vaccinated **at 4 month of age** and again when **10 month** .