



CLINICAL DISEASE: RABIES



Rabies is an enzootic disease and human disease follows a bite by a rabid animal, infectious material such as saliva coming into contact with broken skin or Inhalation of virus-containing aerosols. The incubation period ranges from 7 days to several years and tends to be shorter in children. Multiple bites, introduction of large numbers of infectious material and bites closer to the head and neck are associated with shorter incubation periods.

There is a non-specific prodromal phase characterised by:

- mild fever
- headache
- nausea
- sore throat
- drowsiness
- irritability
- and restlessness

The patient may also complain of pain or itching at the site of the bite. This period lasts between 4-10 days before the onset of more specific signs and symptoms of rabies. The disease progression then takes either one of two forms: furious or paralytic rabies.

1. Furious Rabies

This is characterised by rapidly fatal brainstem encephalitis which is associated with anxiety and hyperexcitability accompanied by mounting fever. Fluctuating consciousness, involuntary twitching movements and generalized convulsions are often seen. Bizarre behaviour may alternate with moments of lethargy. Violent spasmodic contractions of the muscles of the mouth, pharynx, or larynx when the patient attempts to drink, or merely at the sight of water are the characteristics which have given rabies its other name, hydrophobia.

The patient may drool profusely from the mouth to avoid swallowing, which is associated with painful spasms. Within days the patient's condition worsens, pulse rate increases, respiration become more laboured, and the temperature rises. Periods of responsiveness become less frequent, and muscular spasms may give way to paralysis. Peripheral vascular collapse, coma, and death quickly follow. The disease runs its entire course in 2-18 days.

2. Paralytic Rabies

Runs a less dramatic course, but the outcome is the same. There is ascending flaccid paralysis with pain and fasciculation in the affected muscles, and mild sensory disturbances will precede death from bulbar and respiratory paralysis. This picture resembles that of Guillain-Barre syndrome so that in the absence of a known history of rabies exposure, such patients will go through the entire course of illness with no suspicion of the diagnosis of rabies until the characteristic findings of Negri bodies and Lyssa bodies in brain cells are observed at autopsy.

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