

The Use of the Corneal Test as an Ante—Mortem Method of Rabies
Diagnosis in Human Patients

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OBJECTIVE: To perform the *intra vitam* corneal test in selected cases of human rabies and thereby to determine whether a more extensive evaluation of these tests is warranted.

DESCRIPTION: There have been reports of the successful application of the fluorescent antibody technique to corneal impression smears from experimentally infected animals (Schneider, L.G., 1969, Zentralbl. Vet. Med., 16,24—31). There is at least one report of the successful use of this procedure in the ante—mortem diagnosis of a human case of rabies. (Cifuentes, E., et al, 1971, J. Trop. Med. Hyg. 74, 23—25).

Recently, we have performed the corneal test on two human rabies patients. The first patient was a 43 year—old woman who had been bitten by a rabid dog 3 weeks prior to the onset of symptoms. Corneal impressions were taken before and after death, and in both instances positive immunofluorescence was detected. Post mortem examination of the brain revealed positive immunofluorescence as well as the presence of Negri bodies in formalin—preserved samples. The second case involved a 22 year—old American soldier who had been bitten by a rabid dog 6 weeks before the onset of symptoms. Positive immunofluorescence was detected in corneal impressions taken 11 days before death. Post mortem corneal samples were also positive. The diagnosis of rabies was confirmed by the observation of positive immunofluorescence and Negri bodies in the brain after death.

PROGRESS: Considering these encouraging initial findings, critical evaluation of the corneal test in human rabies patients is warranted. A research proposal for this purpose has been developed. At least twenty human rabies patients will be studied to determine the reliability, specificity, and time of development of corneal immunofluorescence.