Amoss, H. L., and Taylor, E. NEUTRALIZATION OF VIRUS OF POLIOMYELITIS BY NASAL WASHINGS. [Vermont Medicine, Aug., 1917.]

Tests were made by Amoss and Taylor to determine the effect of concentration of washings on the activity of the virus. Amounts of virus which would certainly produce the infection if injected directly were added to a filtered washing fluid obtained from persons not having been exposed to the infection. The mixtures were separately reduced to small volume in vacuo at low temperatures and injected into monkeys. The results obtained were variable, for reasons which at first were not obvious, but the tests nevertheless showed that the filtered virus in certain amounts may withstand concentration in washing fluids without losing entirely its infective power. The nasopharynx was rinsed with double distilled water and the washings were fractionally sterilized by heating to 60° C. for three successive days. Each person's specimen was handled separately. The virus employed was obtained by filtering a 5 per cent. suspension of glycerolated poliomyelitic monkey spinal cord. To each 30 c.c. of the washings 7.5 c.c. of the filtered virus were added. The mixture was then incubated at 37° C. for twenty-four hours. Control mixtures of virus and distilled water were subjected to the same incubation. Each cubic centimeter of the mixtures then contained 0.2 c.c. of the filtrate, or at least two minimum lethal doses of the virus. The results of this experiment suggest that the nasal washings of a person suffering from acute poliomyelitis may exercise no restraining influence on an active virus, while those from healthy persons, under identical conditions of preparation, inhibit its activity. The secretions of apparently normal persons vary in the so-called neutralizing power. In each series of experiments the potency of the virus was established by control experiments. The secretions of three persons out of the six examined varied in their power to neutralize 0.2 c.c. of the virus filtrate at different times under nearly identical conditions, yet the only known clinical differences consisted in the presence of a rhinitis which appears to remove the inactivating power of the secretions.

Remlinger, E. TRANSMISSION OF RABIES TO FETUS. [Bull. d. l'Acad. d. Med. d. Paris, April 8, 1919. J. A. M. A.]

Remlinger reports some striking experimental experiences which confirm Konradi's statements in 1916. Animals inoculated with rabies may not display any signs of the disease for from one to three months, while their young born in the interim present rabies and may have died before the mother shows any signs of the disease. Remlinger relates that one guinea-pig thus developed rabies 122 days after the inoculation, sixty-eight days after the casting of the litter, and thirty-eight days after the death of the last one of the young. In Konradi's guinea-pigs, rabbits and bitches the interval sometimes was over a year before the animal succumbed to the rabies that yet it had transmitted to its young in the

uterus. These facts throw light on cases in which rabies has been transmitted to man by an apparently healthy animal; it may be harboring the rabies virus in its blood. Young animals may be apparently healthy and yet they may have been infected in the uterus, and they may develop rabies at any moment without further contact. The fact that the young dog or other animal has never had a chance for being bitten, thus does not exclude the possibility of rabies. The experiences related suggest also that possibly the fetus might become immunized by minute amounts of the rabies virus traversing the placenta. In conclusion he suggests further the possibility that the rabies virus might in certain cases induce other clinical pictures than typical hydrophobia or paralytic rabies. We know that it may induce Landry's paralysis, and it is possible it may be responsible for certain other forms of acute mania, etc.

Marie, P., and Chatelin, C. PARALYTIC FORMS OF RABIES. [Bull. d. l'Acad. d. Med., Ap. 8, 1919.]

A boy of 11 developed symptoms simulating poliomyelitis, a rapidly acute ascending paralysis, and died in a few days. He had been bitten five weeks previously on the lip. He first began to be agitated, then had screaming attacks and then paralysis in the legs. Acute polioencephalomyelitis, with the findings of rabies, confirmed by inoculation of rabbits were obtained on autopsy. The authors' report on the extreme frequency of the disease since Jan., 1919, citing that at least 220 cases of rabies in animals have occurred in three months.

Fournier, J. C. M. ECHINOCOCCUS OF SPINAL CORD. [Rev. Med. d. Uruguay, Sept., 1918. J. A. M. A.]

Fournier reports a case of paraplegia in a boy of twelve developing suddenly with no other symptoms except pains in the back for the last two weeks, and a similar attack of pains in the upper dorsal vertebræ for two weeks three years before. The motor disturbances were more an ataxia than paralysis; the spinal fluid seemed to be normal and the Wassermann and tuberculin tests elicited no response, but roentgenoscopy showed a process of rarefaction in the fifth dorsal vertebra and sixth rib, the seat of the pains and of some tenderness. A syphilitic osteitis at this point was assumed, but no benefit was derived from specific treatment, the paraplegia growing constantly worse. A successful operation revealed echinococcus cysts in the muscles close to the fifth and sixth dorsal vertebræ and in the posterior perimeningeal space, in the spinal canal, and also in the subpleural tissue on one side. The process was evidently of two or three years' standing and it had eroded vertebræ and yet had caused no persisting pains or root symptoms while the extreme hypotony of the paraplegia was in marked contrast to the exaggeration of the bone, periosteum and tendon reflexes and the foot clonus.