

Dourine Infection in Young Equines.

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In an article on dourine, de Kock, Robinson and Parkin (1939) showed that foals from infected mares would react to the complement fixation test as soon as they had drunk the colostrum milk and would remain reactors for two to four months afterwards. They then became negative and did not react again. Reference was made to the fact that it had been observed on infected farms that foals seven to nine months old might sometimes give positive reactions. One such foal was brought to Onderstepoort and continued to react until it died at thirteen months of age. On account of these somewhat contradictory observations it was decided to carry out some further experiments.

In a test carried out on a farm in the Barkly West district, six young mares reacted strongly. Their ages were from 9 to 15 months and one can assume that they had not been served. These young mares were brought to Onderstepoort and kept from contact with other equines until they reached sexual maturity when they still reacted strongly. An experiment was then arranged in which a stallion 22091 which had been kept in isolation for a few months and given negative reactions to the dourine test consistently, was placed in a camp with the six mares Nos. 22500, 22501, 22502, 22503, 22504 and 22506. The stallion had never been in contact with infected animals and could be considered to be uninfected.

The experiment was started on 2.10.41. The stallion was seen to serve some of the mares during the next month. One of the mares 22500 was found dead on 1.11.41 without having shown any symptoms of illness. At post mortem the lesions found were cirrhosis of the liver, dilatation of the stomach and impaction of the colon with sand. On 7.11.41 another of the mares 22503 had to be killed on account of weakness and decubitus. At the post mortem examination changes due to cachexia were observed. Washings from the vagina, uterus and cerebro-spinal fluid were examined but no trypanosomes were found. The stallion gave a completely negative reaction at the commencement of the experiment, but on 20.11.41 gave a positive reaction. The reaction was only completely positive in the standard test amount of serum, 0.2 c.c., but at subsequent tests over the next few months became strongly positive.

Blood was taken on 20.11.41 in order that an examination for trypanosomes could be made. *T. equiperdum* was demonstrated in small numbers, which completed the proof of infection from the mares, and the experiment was then discontinued.

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CONCLUSIONS.

1. Foals may become infected with dourine before sexual maturity. Cases are described where infection had occurred at 9 months or younger.
2. Such foals on reaching sexual maturity are capable of transmitting the infection to a stallion during service.

REFERENCE.

DE KOCK, G., ROBINSON, E. M. AND PARKIN, B. S. (1939). *Journal S.A.V.M.A.*, Vol. 10, pp. 45-55.