

A SEROLOGICAL STUDY OF SOME VIRAL DISEASES IN CALVES NEWLY BORN WITH CONGENITAL ABNORMALITIES IN TURKISH REPUBLIC OF NORTHERN CYPRUS

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Kuzey Kıbrıs Türk Cumhuriyeti'nde yeni doğan kongenital anomalili buzağılarda bazı viral hastalıklar üzerine serolojik bir araştırma

Özet : *Bu araştırmada Kuzey Kıbrıs Türk Cumhuriyeti'nde 1998 yılında kongenital anomalili doğduğu tespit edilen 27 buzağının serum örneklerinde Akabane, Mavidil ve Bovine Viral Diarrhoea viruslarına spesifik antikorlar nötralizasyon testiyle araştırıldı. Serum örneklerinden 5 (%18.9) adetinin AKA, 17 (%62,9) adetinin BVDV antikorları yönünden pozitif olduğu, 3 serum örneğinin ise her iki virusa karşı da antikor taşıdığı saptandı. Serum örneklerinin hiç birinde BT spesifik antikorlar saptanamadı.*

Anahtar kelimeler : *Akabane, BVD, Kuzey Kıbrıs Türk Cumhuriyeti, Mavidil*

Key words : *Akabane, Bluetongue, BVD, Turkish Republic of Northern Cyprus*

The main importance of bovine viral diarrhoea (BVD), blue tongue (BT), akabane (AKA) infections is the outcome of foetal infections, if transplacental spread of the virus occur. Transplacental infections with these agents may result in foetal brain malformations and lesions, cerebellar hypoplasia, ocular defects, birth of weak and undersized calves and birth of apparently normal calves. Additionally, BVDV infections can cause birth of calves persistently infected with BVD virus (2, 3, 5).

Birth of calves with congenital abnormalities have been observed in 1998 in Turkish Republic of Northern Cyprus. In the present paper, some serological results obtained from these calves with congenital abnormalities discussed.

For this purpose, 27 blood sera samples obtained from calves with congenital abnormalities were tested BT, AKA and BVD antibodies.

For screening purposes as well as for quantitative determination of antibodies against these agents, the simultaneous technique of microtiter neutralisation test was applied (1).

Out of 27 blood sera tested 5 (18.9 %) showed AKA antibody and 17 (62.9 %) showed BVD antibody. Three serum samples were also found positive for both of them. No sera were found to be positive for BT antibodies.

The evidence of the presence BT and AKA infections is known in Cyprus for last three de-

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caedes (4,6). But their importance of congenital abnormalities in calves has not been detected virologically.

The presence of BVD infections in Turkish Republic of Northern Cyprus cattle has been also detected by Burgu et al. (unpublished data).

The results of present study also show the presence of these infections in Turkish Republic of Northern Cyprus, but these data don't exactly mean that BVD, AKA and BT cause birth of calves with congenital abnormalities.

However, depending on the results of this study and numerous investigations describing the role of concerning viruses on congenital abnormalities, it may be speculated that BVD, AKA, and BT virus infection might be cause of calves birth with congenital malformations faced-up in Turkish Republic of Northern Cyprus.

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