

# Preliminary Diagnosis of Bovine Viral Leukosis in Iraq

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Bovine viral leukosis has been documented in bordering countries to Iraq.<sup>1</sup> The disease is suspected clinically and haematologically in Iraq, but not confirmed by serological or virus isolation methods.

Twenty three cases of dairy cattle suffering from loss of condition ranging in age from 2-8 years except for two cases below 2 years of age, were examined serologically and haematologically for bovine viral leukosis.

Serological diagnosis was performed by the agar gel immunodiffusion (AGID) technique as described by<sup>2</sup> except for the replacement of agarose by noble agar. Standard antigen and antisera were used in the AGID. Total and differential leukocyte counts were carried out.

The AGID detected one case positive for bovine viral leukosis, while the remaining cases (sera) were negative. The haematological picture of the positive case and the remaining negative cases had increases in the total leukocyte counts which were attributed to systemic non-viral infections. Virus isolation was not attempted. The present serodiagnosis is the pioneering report on the disease in Iraq. Further studies will be conducted.

## References

1. Oden'hal, S. The Geographical Distribution of Animal Viral Disease. Academic Press. 1983. p. 79.
2. Olson, C., Hoss, H.E., Miller, J.M. and Baumartener, D.E. Evidence of Bovine C type (leukemia) virus in dairy cattle. *J.A.V.M.A.* 1973. Vol. 163. No. 4, P. 355.

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## Necrotic enteritis of unknown aetiology in young beef calves at pasture.

**C.D. Penny, P.R. Scott, N.J. Watt, A. Greig.**

*Veterinary Record* (1994) 134, 296-299.

An enteric disease has occurred for four consecutive years (1989 to 1992) in a spring-calving beef suckler herd in east central Scotland affecting seven- to 12-week-old beef calves. The affected animals remained pyrexia (40 to 42°C) with an acute enteritis which progressed in some cases to severe mucohaemorrhagic colitis. Despite intensive antibiotic and fluid therapy 25 per cent of the affected calves died after five to 10 days of illness. Post mortem examination revealed ulceration and necrosis of the mucosa of the abomasum and small and large

intestine. Haematological examinations revealed a severe, non-regenerative neutropenia. Histopathological examination of gut and associated lymphoid tissue revealed lesions similar to those described in bovine viral diarrhoea/mucosal disease (BVD/MD) infection, but detailed investigations failed to reveal evidence of the active BVD virus infection in the herd. No aetiological agent has been found in association with this disease, for which the term necrotic enteritis is proposed.

# Abstracts

## **Natural transmission of foot-and-mouth disease virus from African buffalo (*Syncerus caffer*) to cattle in a wildlife area of Zimbabwe.**

**P. S. Dawe, F. O. Flanagan, R. L. Madekurozwa, K. J. Sorensen, E. C. Anderson, C. M. Foggin, N. P. Ferris, N. J. Knowles.**

*Veterinary Record* (1994) 134, 230-232.

An outbreak of foot-and-mouth disease (FMD) occurred during April 1991 in a trypanosomiasis sentinel cattle herd by the Rifa River to the east of Lake Kariba, Zimbabwe. Despite the cattle having been vaccinated biannually for the previous five years the disease was severe. The viruses isolated from the affected animals were typed as FMD virus type SAT 1. Free-living African buffalo (*Syncerus caffer*) which had been using the same watering place as the affected cattle, were sampled and

FMD type SAT 1 virus was isolated. Partial nucleotide sequencing of the gene coding for the capsid protein 1D (VP1) of one of the viruses isolated from cattle and two of the viruses isolated from buffalo demonstrated a close relationship between the three viruses. Since no other cattle were present in the area and no outbreaks of SAT 1 had occurred in Zimbabwe since 1989, it was concluded that the disease had been transmitted from buffalo to cattle.

## **The bovine placentome in bacterial and mycotic abortions.**

**C. T. Johnson, G. R. Lupson, K. E. Lawrence.**

*Veterinary Record* (1994) 134, 263-266.

Placentomes were extracted from the uteri of 22 aborted cows and examined to detect the cause of abortion; fetuses or fetal abomasal contents from 15 of the cows were also examined. Firm diagnoses of *Pasteurella haemolytica*, *Actinomyces pyogenes*, *Listeria monocytogenes*, *Bacillus licheniformis*, *Aspergillus fumigatus* or *Mortierella wolfii* abortion were made in

11 cases. The histopathological lesions showed some correlation with the identity of the bacterium isolated; the lesions of mycotic abortion were distinct and characterized by a coagulative necrosis. The removal of a placentome was not followed by any observable deleterious effects.

## **Effects of buserelin on pregnancy rates in dairy cows.**

**S. B. Drew, A. R. Peters.**

*Veterinary Record* (1994) 134, 267-269.

Three field trials were carried out to assess the effect of buserelin on the fertility of dairy cows. In the first, 10 mg of buserelin was injected on the day of insemination; there were no significant effects on fertility in comparison with untreated control cows. In the second study the cows were injected 12 days after insemination; the mean pregnancy rates to first insemination were 53.4 and 65.4 per cent for the control and treated cows, respectively ( $P < 0.01$ ) and the mean pregnancy rates to

repeat inseminations were 52.9 and 59.4 per cent for the control and treated cows. The mean calving to conception intervals were 91.4 and 85.3 days ( $P < 0.01$ ) and the incidences of barren cows were 10.2 and 5.2 per cent. In the third study the cows were injected with buserelin either eight days or 10 days after insemination; there were no significant effects on fertility in comparison with untreated control cows.