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Abstract

Diagnostic reliability of clinical signs in cows with suspected bovine spongiform encephalopathy

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The clinical findings in 50 cows with suspected and subsequently confirmed bovine spongiform encephalopathy (BSE) (group A) were compared with the clinical signs in 22 cows with suspected BSE, but with no histological evidence of the disease (group B). The chi-square test for association was used to compare the frequencies with which diagnostic signs or combinations of signs, were positive in the cows of groups A and B. When the frequency of a sign differed significantly, its sensitivity, specificity, efficiency and positive and negative predic-

tive values were calculated. With respect to changes in behaviour the cows in group A more frequently showed increased excitability, nervous ear and eye movements, increased salivation and increased licking of the muzzle than the cows of group B. With respect to changes in sensitivity the cows in group A were more frequently hypersensitive to touch, noise and light than the cows of group B. With respect to changes in locomotion the cows in group A were more frequently ataxic than the cows in group B.

Exploratory study on the economic value of a closed farming system on Dutch dairy farms

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A closed farming system may prevent the introduction of infectious diseases on to dairy farms and could be a good starting point for the eradication of these diseases. In order to introduce a closed farming system, farmers need to be made aware of how these are introduced into the herd. Farmers will be more likely to implement a closed farming system when the economic value is quantified and attractive. An exploratory study was carried out to investigate the technical and economic results of closed dairy farms. Farms that purchased cattle and/or shared pasture (defined as 'open' farms) differed in technical results from farms that did not

('closed' farms). The results of the discriminant analysis showed that the 'closed' farms incurred lower costs for veterinary services, had a lower average age at first calving and a higher birth rate per 100 dairy cows. A linear regression analysis was carried out to investigate the influence of the farming system on economic performance. Being 'closed' was found to increase the net profit by £0.31 per 100 kg of milk, or approximately £25 per cow per year or 5 per cent of the typical net return to labour and management (£1 = Dfl 2.80 in November 1996).