

New bovine disease in the United Kingdom

Veterinarians in South Africa should be aware that a new, slowly progressive neurological disorder of adult cattle has been recognised in the UK. It was first diagnosed in November 1986. Previously healthy cattle, in good body condition, became apprehensive, hyperaesthetic and mildly ataxic. Degenerative lesions were subsequently found in the brains of these animals and the condition was called bovine spongiform encephalopathy (BSE). BSE has not been reported in any other country. Subsequently, further cases were found in the UK and the growing incidence prompted a detailed epidemiological investigation which has confirmed that BSE is a new disease.

BSE has been seen only in animals over 2 years of age. The onset is insidious but signs worsen over a period of 1-6 months and it is invariably fatal. Most cases have occurred in Friesian/Holstein breeds of dairy cows and the greatest concentration of cases is in the south of England. The disease is rare in bulls although, given that bulls represent only a very small proportion of the dairy population, this is not surprising. No association has been found with stage of pregnancy, lactation or season.

The aetiology of BSE remains unclear. It was not introduced to the UK via the importation of cattle or semen. No association has been found with the use of therapeutic or agricultural chemicals and specific genetic analyses have precluded BSE being due exclusively to a simple Mendelian mode of inheritance. Nor is there evidence of spread by direct or indirect transmission on affected farms. Circumstantial evidence suggests that a scrapie-like agent in meat and bone meal which was included in proprietary cattle feedstuffs may be the cause. Concentrates were fed to all cases for which accurate records are available.

The presenting signs are variable, but in the majority of cases include behavioural disorders, gait and postural abnormalities, paresis and loss of body weight. The history usually begins with altered behaviour and temperament

including apprehension, anxiety and fear. Behavioural changes vary from case to case - some cows may paw the ground or continuously lick their nostrils; commonly there is increased reaction to stimuli such as sound and touch.