plasma cell reaction around them. There was scattered degenerative swelling of neuronal bodies and fibres and general swelling of neuroglial cells.

Three Ancylostoma species have been identified in dogs and cats in coastal north Queensland, A. caninum, A. brasiliensis and A. tubeiforme (Setasuban and Waddell 1975). The prevalence of A. caninum is particularly high in the dog. Skin-penetrating larvae migrate via the blood during their life-cycle while those ingested usually develop directly in the intestine (Okoshi and Murata 1968) and only occasionally invade other organs. Aberrant migration of A. caninum and other nematodes, particularly ascariids, is a common phenomenon in abnormal hosts. Invasion of the central nervous system and ocular tissues of mice and man by larvae of Toxocara canis is well known (Kelly 1977) and Sprent (1955) reviewed apparently rare involvement of the central nervous system in other species of animals by members of the Strongyloidea.

A. caninum have been recovered in experimental infections from various organs of the rat (Matsusaki 1950), mice and guinea pigs (Nichols 1956). In the latter species up to half of the larvae were located in the brain, severe damage to the nervous system resulting in death as early as 6 days post-infection. No ocular involvement was found with mice injected per os (Olsen et al 1972) and only a small percentage were recovered from the brain or cord. In none of these cases of aberrant ancylostomiasis was there any development of the larvae beyond the third-stage although Nichols (1956) reported a slight increase in size.

The present case appears to be an example in which partial maturity of the nematode was achieved and a critical anatomical structure affected in the normal host, circumstances that hitherto have not been recorded with this genus of parasite. The prevalence of ancylostomiasis in Queensland suggests that cerebrospinal nematodiases in dogs may be commoner than is realised.

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PERINATAL FOAL MORTALITY ASSOCIATED WITH A HERPESVIRUS

Equine herpesvirus 1 (EHV 1) has been recognised in Australia for a number of years; however in contrast to overseas experience the association of EHV 1 with clinical abortion or neonatal foal mortality has not been reported.

On 16 September, 1977 one 3-day-old foal, from a thoroughbred stud in the Camden district, died with severe respiratory distress. On the basis of histopathological examination it was subsequently diagnosed to have herpesvirus infection. Prior to 24 October 1977 90 mares have foaled and 22 foals have died associated with the infection. Foals either were stillborn or were weak and soon developed severe respiratory symptoms. Onset of symptoms was sudden and progressed to death within 24 hours. Autopsy showed grossly enlarged lungs that were very firm, oedematous and purple in colour. Some had only a few scattered aerated lobules. Other lungs showed a greater degree of aeration and moderate to severe oedema and congestion. Fluid and haemorrhagic striations were noted in the trachea and bronchi. Excessive fluid was not found in either the thoracic or abdominal cavities. The spleen was marginally enlarged and the lymphoid follicles were often more prominent. Hepatic lesions were not seen.

Histopathology of lung showed a moderate to severe alveolar oedema with congestion and collapse associated with a slight to moderate acute necrotising bronchitis with a few to many eosinophilic intranuclear inclusions in bronchiolar epithelium.

A herpesvirus was isolated from 10 foals in dog kidney cell culture and identified by electron microscopy.

This centre has also identified herpesvirus infection of a still born foal from the Oberon district. Now that the disease has been identified in 3 geographical areas in New South Wales further outbreaks would be anticipated.

A detailed report will be published in a subsequent issue of the Australian Veterinary Journal.

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CAROLINE FEILEN, R. F. JONES, DARIA N. LOVE, MARGARET SABINE, ANNE L. WELLS, Department of Veterinary Pathology, University of Sydney, Sydney, New South Wales, 2006. 14 November 1977.
We would like to draw your readers’ attention to an editorial faux pas which appeared on page 508 of the October issue of the Australian Veterinary Journal. We submitted a letter entitled “Isolation of Leptospira interrogans Serotype balcanica from a Brush-tailed Possum (Trichosurus vulpecula)”, but in the published article opossum had been substituted for possum in the title and throughout the text. This change is unfortunate and incorrect.

Evidently, Captain Cook in 1770 applied the name opossum to the Australian arboreal marsupials because of a superficial resemblance to the American opossoms (Walker 1968; Troughton 1973). However, American opossoms belong to the Family Didelphidae which comprises 70 species, while Australian brush-tailed possums belong to the Family Phalangeridae. Didelphid marsupials are polyprotodont (having 5 pairs of incisors), whereas American arboreal marsupials are diprotodont (having 2 pairs of incisors). Altogether there are 40 species of Australian phalangers (possums) which have recently been divided into 3 families: Phalangeridae, including brush-tailed possums and cuscuses; Burramyidae, the pygmy possums; and Petauridae, consisting of ringtails and gliders (Kirsh and Calaby 1977).

Thus, the more correct common name to use for Trichosurus vulpecula should be the brush-tailed phalanger, but common usage favours the name possum instead, thus emphasising that this marsupial is distinct from the American opossum (Walker 1968; Troughton 1973).

Current information about marsupial speciation, evolution and biology can be obtained in The Biology of Marsupials by Stonehouse and Gilmore (1977).

PLACING POSSUM

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[In the Shorter Oxford Dictionary 1964 the entry under possum reads — Now colloq. 1813. Aphetic form of OPOSSUM. The entry under opossum reads — 1610. 1. General name of the small marsupial mammals of the American family Didelphidae mostly arboreal, some (genus Chironectes) aquatic, of nocturnal habits, with an opposable thumb on the hind foot, and tail usu. prehensile; esp. Didelphis virginiana, the common opossum of the U.S. (Colloq. shortened to POSSUM, q.v.). 2. Extended to various small or moderate-sized marsupials; esp. the common name in Australia and Tasmania [sic] of those of the sub-family Phalangistinae, more properly called Phalangers 1777. Editor]

UNEXPECTED ISOLATION OF A NEWCASTLE DISEASE VIRUS

For a study of antigenic relationships between Australian infectious bronchitis (IB) viruses by virus neutralisation, using the plaque reduction method, we obtained samples of IB viruses that had been isolated during the last 15 years from Australian flocks. We obtained one strain, designated G48, which had been isolated by Chubb et al (1976) and, after 4 passages in chick embryos, had been identified as an IB virus on the bases of morphology of the virion and of lesions in chick embryos and in chickens inoculated with the virus. They concluded from the results of cross-neutralisation tests in chick embryos that G48 virus was serologically distinct from the IB viruses in 2 commercial vaccines and from the A and T isolates of IB virus of Cumming (1967). Their studies were carried out using G48 virus at the fifth egg passage.

A sample of G48 virus at the sixth egg passage (hereafter referred to as original G48 virus), was kindly supplied by Professor R. B. Cumming. This was passaged once in chick embryos and then once in monolayer cultures of chick embryo kidney (CEK) cells. The fluid from this cell passage formed plaques in CEK cells under an agar overlay. ND virus antiserum inhibited both the haemagglutination and the formation of plaques. Individual plaques were picked and inoculated onto further sets of CEK cells. On formation of plaques, the agar overlay was replaced by a fluid medium for 24 hours, after which the CEK cells adsorbed fowl red blood cells.

Isolation of IB virus from G48 material at the fifth egg passage was attempted by adsorption of ND virus with fowl red blood cells followed by neutralisation of residual ND virus by monospecific ND virus antiserum with subsequent passages in chick embryos. No lesions suggestive of IB virus were seen in the embryos, which were examined 7 days after inoculation.

A further sample of the G48 virus at the fifth egg passage labelled “G48/5/5 ex R.C. Jan 74” was obtained from the Reference Collection of Australian strains of IB virus (Geering and Bruce 1970). This sample, which did not contain detectable haemagglutinins, was inoculated into chick embryos and onto CEK cells. Allantoic fluid from the inoculated eggs agglutinated both human O and fowl red blood cells. Plaques formed in the CEK cells under an agar overlay. ND virus antiserum inhibited both the haemagglutination and the formation of plaques. Individual plaques were picked and inoculated onto further sets of CEK cells. On formation of plaques, the agar overlay was replaced by a fluid medium for 24 hours, after which the CEK cells adsorbed fowl red blood cells.

Isolation of IB virus from G48 material at the fifth egg passage was attempted by adsorption of ND virus with fowl red blood cells followed by neutralisation of residual ND virus by monospecific ND virus antiserum with subsequent passages in chick embryos. No lesions suggestive of IB virus were seen in the embryos, which were examined 7 days after inoculation.

Our experiments strongly suggest that ND virus was present in samples of the G48 material at the fifth and sixth egg...