

LETTER TO THE EDITOR

*ECHINOCOCCUS GRANULOSUS* SURVEY IN DOGS

SIR: To increase our base population of sheep and to upgrade our Malin sheep by cross-breeding, the Department of Veterinary Services, Malaysia and other agencies have been importing several exotic breeds of sheep from different countries for a number of years. It was decided to study the possible introduction inadvertently of the parasite *Echinococcus granulosus* which can cause hydatid disease in man and other domestic animals by examining stray and feral dogs from different parts of the country.

Two earlier studies by Shanta *et al.* (1977) and Sheikh-Omar *et al.* have not reported the presence of *Echinococcus granulosus* in dogs. Yap *et al.* (1983) however reported that hydatid cysts were detected at the Shah Alam abattoir from cattle imported from Australia in 1979. Following a pilot study on eleven stray/feral dogs at Pulau Langkawi near the town of Kuah, the Department of Veterinary Services examined stray/feral dogs that were found in or near abattoirs, large hotels, dogs within city/town limits and in or near sheep farms especially in rubber and oil palm estates in different parts of the country (Table 1). The study was conducted between December 1990 and November 1991.

Table 1. *Echinococcus granulosus* survey in dogs in Peninsular Malaysia

Lab./State	Total Number of Dogs	Location of Dogs			
		Abattoir	Hotels	City/Town	Sheep Farm
RVLPI/Selangor	45	7	12	15	11
RVLJB/Johor	30	0	8	20	2
RVLK/Pahang	30	3	3	3	21
RVLKB/Kelantan	39	10	11	18	0
RVLBT/P.Pinang	30	0	3	25	2
RVLAS/Kedah	30	0	5	20	5
VRI/Perak	45	5	4	16	20
P.Langkawi	11	0	0	11	0
Total	260	25	46	128	61

Necropsy of the dogs was performed. The small intestine ligated and separated from the rest of the gastrointestinal tract was opened along its entire length and the contents

transferred to a 160  $\mu$  aperture sieve. The mucosa was scraped with a flat spatula against a flat background to free attached worms. The scrapings were added to the sieve and thoroughly washed together with the intestinal contents. The washings (residue) were preserved with 10% formalin and examined for *E. granulosus* using a dissecting microscope at a magnification of X 10 (Baldock *et al.* 1985).

As a complementary study, 10 cysts found in cattle (5), goats (3) and sheep (2) detected at meat inspection from abattoirs were closely examined at the nearest Regional Veterinary Laboratory for *E. granulosus*.

All 260 dogs examined were negative for *E. granulosus* worms. The ten cysts obtained for examination of hydatid cysts from the Shah Alam abattoir proved to be negative.

It is felt that surveillance during meat inspection at abattoirs be continued and may in fact be our best means of detecting *E. granulosus*. Similar surveys of dogs for adult worms should be done regularly so that an early detection and monitoring system can be instituted.

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