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GASTRIC SQUAMOUS TUMOR IN THE STOMACH OF A PADEMELON *(Thylogale billardieri)* ASSOCIATED WITH AN INFESTATION WITH *Labiostrongylus* SP. LARVAE

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It has been suggested that epithelial neoplasms of the gastrict mucosa in wild animals are of sufficient interest to warrant recording;[1] therefore it is hoped that this report will be of some value to comparative pathologists.

An adult pademelon (scrub wallaby) was shot on King Island during a survey of the parasitic fauna in this species. Because the operation was undertaken at night an accurate description of the gross lesions was not made, but the lesion of the stomach was noted to be invagination of the mucosa with papilloma-like outgrowths between which were packed large numbers of helminth larvae. These larvae were subsequently identified by Dr. Patricia Thomas of the University of Adelaide as immature (probably 4th stage) *Labiostrongylus sp.* The tumor itself was fairly well differentiated. The deeper surface cells had scanty, eosinophilic cytoplasm and large, vesicular nuclei, those cells closer to the surface contained more cytoplasm and had even more vesicular nuclei, whilst the cells of the last few layers were degenerate, eventually remaining only as squames. In many areas infection modified this picture by stimulating leucocytic infiltration and leading to premature loss of epithelial cells. In the nuclei the nucleoli were prominent, but not particularly bizarre, and mitoses were not common. Cords of neoplastic cells were noted infiltrating deeply into the submucosa, and in this region the tumor had the typical reverse-morphology of a squamous-cell carcinoma with the presence of epithelial pearls surrounded by less mature epithelial elements.

As pointed out by Jubb and Kennedy[2] it is quite possible that these tumors could be initiated, in part at least, by a chronic irritative response to parasitic infestations of the stomach.

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