SYSTEMIC MYCOSIS IN A GREEN TREE FROG (*Litoria caerulea*) (CASE 1374.1)

CASE HISTORY

An adult green tree frog died after a brief period of anorexia, depression and weight loss. This animal was the smallest of three captive frogs. The body was kept in a refrigerator for 48h then put into formalin and submitted to the Registry.

HISTOPATHOLOGY

Lesions are not evident within the tissues: kidney, ova, small intestine, myocardium, kidney, and oviduct.

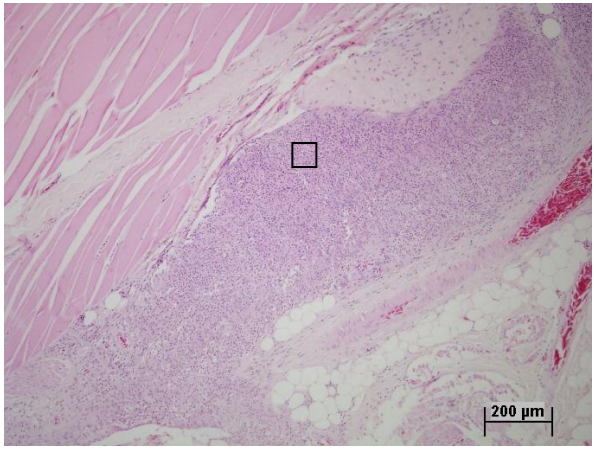

Fig 1. Granuloma, epaxial skeletal muscle. H & E 40x.

Multiple extensive and coalescing granulomas are evident within many organs including the epaxial skeletal muscle (**Fig 1)** liver, thigh muscle, lung and meninges. These granulomas consume large portions of the tissues involved. The granulomas are composed of aggregates of epithelioid macrophages and small numbers of heterophils. Scattered throughout the infiltrates are multiple oval, basophilic structures that have a thin wall and often contain four or more internal round structures **(Fig 2).** These organisms often appear to be contained within cytoplasmic vacuoles of mononuclear cells and are strongly PAS positive (**Figs 3, 4**).

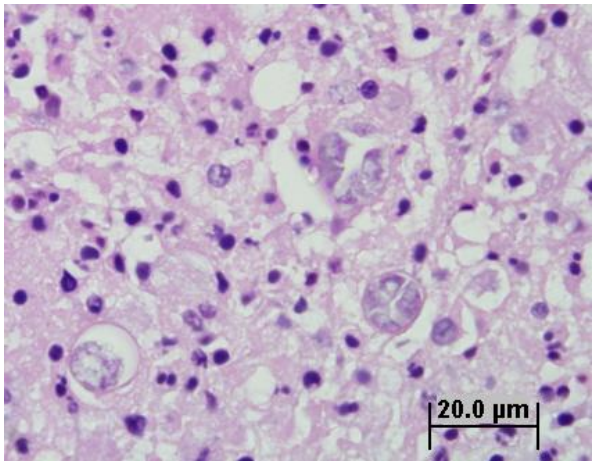

Fig 2 (inset Fig1). Organisms in granuloma. H&E. 1000x.

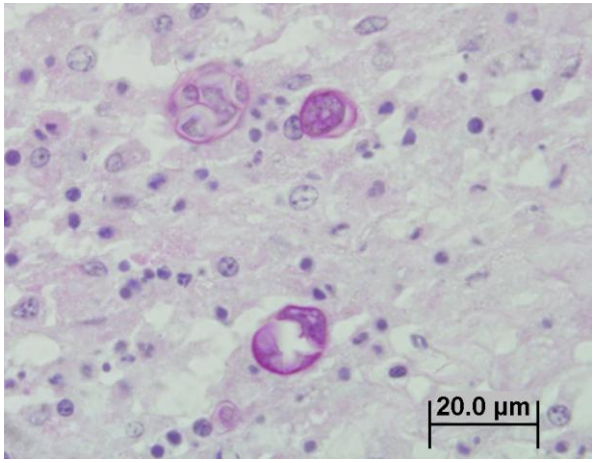

Fig 3. Orgainsims in granuloma. PAS 1000x

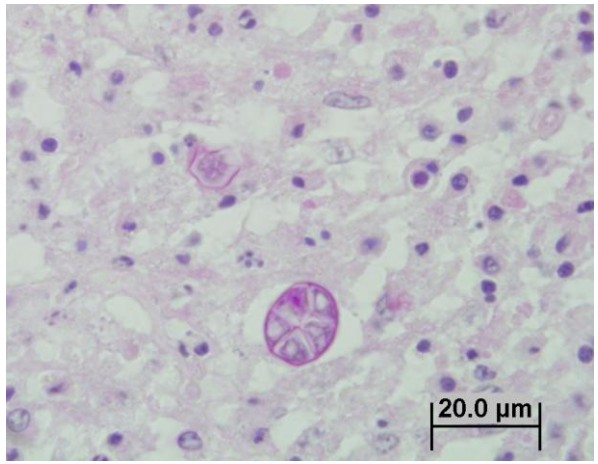

Fig 4. Organisms in granuloma. PAS 1000x

MORPHOLOGICAL DIAGNOSIS

Multisystemic mycosis

COMMENTS

The frog was suffering from a severe and extensive fungal infection. Although fungal culture would be required to reach a definitive diagnosis, the fungi appear most consistent with *Mucor amphibiorum*.

REFERENCES

JH CREEPER J.H. MAIN C. BERGER L. HUNTRESS S. BOARDMAN W. (1998) An outbreak of mucormycosis in slender tree frogs (*Litoria adelensis*) and white-lipped tree frogs (*Litoria infrafrenata*). Aust Vet J 76(11): 761-762.

http://www.jcu.edu.au/school/phtm/PHTM/frogs/mucor/mucoramphibiorum.htm

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