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Case 1. CSVP 2016-2875 (NTU2014-3021, NTU, W.T. Li, H.W. Chang, V.F. Pang, C.H. Liu, F.I. Wang, T.Y. Chen, J.C. Guo, C.R. Jeng)

Paramesotriton hongkongensis. 16-year-old, female. A high mortality event of Hong Kong newt (Paramesotriton hongkongensis) occurred during Nov 2014 to Jun 2015 in Taipei zoo.

High Mortality Event of Hong Kong Newt (*Paramesotriton hongkongensis*) in Taipei Zoo

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A high mortality event of Hong Kong newt (*Paramesotriton hongkongensis*) occurred during Nov 2014 to Jun 2015 in Taipei zoo. Predominant histopathological findings were multifocal necrotic foci in liver, spleen, and kidney with abundant acid-fast positive bacilli. There were also multifocal to coalescing skin ulcerations with intralesional fungal hypha morphologically consistent with *Saprolegnia* spp. The *Mycobacterium* spp. was 100% identical to the *Mycobacterium marinum* (*M. marinum*) by analysis of the heat-shock protein 65 gene (*hsp65*) and internal transcribed spacer (*ITS*) region. Furthermore, the DNA of *Mycobacterium* spp. was also positive for the mycolactone producing plasmid (*mlsA*), suggestive of mycolactone-producing *Mycobacterium* (MPM). The lesions in these cases caused by *M. marinum* were multiple necrotic foci, which are quite different from the conventional granulomatous lesions seen in mycobacteriosis. This phenomenon could be associated with the anti-inflammatory/apoptotic effects caused by mycolactone and the impaired immune function. To the best of our knowledge, this is the first report of MPM infection in Hong Kong newt.
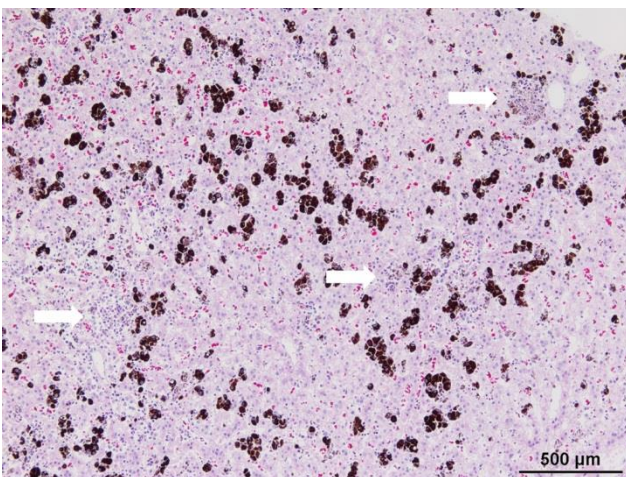
Fig. 1   Multiple necrotic foci (arrows) are found in the hepatic parenchyma.(H&E stain)
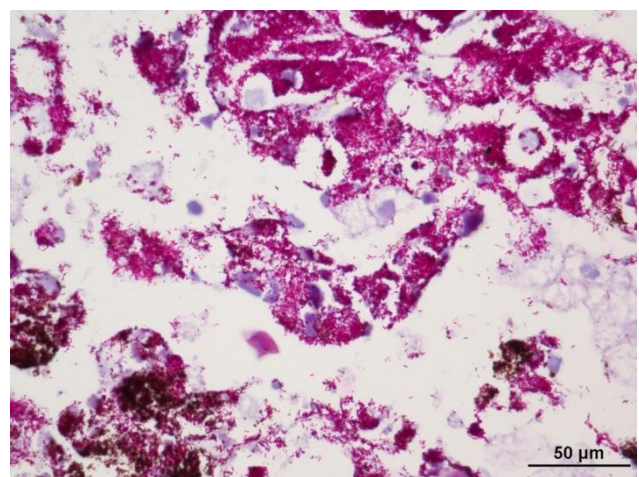

Fig. 2   Abundant acid-fast positive bacilli are noted within necrotic foci. (Acid-fast stain)