Proventricular Haemorrhage in a Sulphur Crested Cockatoo

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A 5 year old male Sulphur Crested Cockatoo (*Cacatua galerita*) was presented for post mortem. The bird died on its way to the clinic after being found suddenly ill that morning.

The body was in good to slightly overweight condition. The skeletal muscle and viscera were diffusely pale. The proventriculus was markedly distended and dilated. There was fresh food in the crop.

Within the proventricular lumen there was abundant dark material (digested blood) and two 1cm diameter x 5mm high cauliflower-like masses which protruded into the lumen. No parasites or foreign bodies were detected in the masses. There was no gross evidence of large areas of ulceration associated with the masses.

Anaemia due to intraproventricular exsanguination was determined to be the cause of death.

Histologically the proventricular masses each consisted of marked polypoid thickening of the proventricular mucosa that extended to involve the inner layer of the smooth muscle . These areas of thickening were characterised by marked expansion of the lamina propria by bands of relatively hypocellular loose fibrous connective tissue containing reactive fibroblasts, extensive areas of oedema with dilation of lymphatics and mild scattered aggregates of mainly mononuclear inflammatory cells. The mass was lined by deeply folded moderately hyperplastic proventricular epithelium that was multifocally ulcerated and eroded. Small capillaries at the superficial aspects of this lesion were congested and there were small aggregates of red blood cells adherent to the eroded and ulcerated surfaces. There were large numbers of gram negative rods scattered throughout the lesion. (A Periodic Acid Schiff stain to demonstrate fungal elements and a Ziehl-Nielsen stain to demonstrate acid fast bacilli were both negative).

On histopathology a diagnosis of Chronic inflammatory polyp with intralesional Gram negative bacterial infection was made. Due to the chronic nature of the lesion the exact initiating cause was not apparent in the sections. The leading possibility would be a chronic proliferative inflammatory response to a penetrating injury or foreign body (eg sharp spikes of ingesta etc) with a secondary Gram negative bacterial infection

Clinically, the case was unusual since the proventricular lesions were chronic, yet the bird showed a very acute onset of clinical signs prior to death. Bleeding (either chronic or peracute) from these proventricular

inflammatory polyps most likely led to the diffuse pallor from anaemia.

Chronic inflammatory polyps should be included in the differential diagnosis of vomiting, regurgitation, delayed crop emptying, enlarged proventriculus and sudden death in cockatoos.