

Disseminated *Staphylococcus* in Adult Moluccan Cockatoo

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Staphylococcus aureus

- *Staphylococcus aureus* may be part of the normal flora of the epidermis and mucous membranes of different species of animals, but can be a pathogenic agent in different psittacine species; however staphylococcal infections of psittacines occur infrequently

Case History

- 22 year old female Moluccan Cockatoo was found experiencing tachypnea, died the next day
- Self-mutilation via feather plucking was observed

Histological Findings

- Lung: pulmonary thromboembolism (Fig 2 and Fig 3); few necrotizing granulomas with multinucleated giant cells; gram stain revealed gram + cocci (Fig 4)
- Blood Vessels: Lumen occluded by thrombus (Fig 5)
- Heart: Myocarditis; serveral blood vessels were plugged by emboli of cocci-shaped bacteria and the tissue was necrotic (Fig 6); valvular endocarditis (Fig 7)
- Botryoid colonies of gram + organism found in multiple organs

Gross Necropsy

- Hydropericardium (Fig 1)
- Proventriculus was dilated with ingesta
- White spots on myocardium
- A great blood vessel of the heart was firm, with its lumen occluded by a thrombus
- Right lobe of liver contained areas of yellow discoloration (Fig 1)



Figure 1: Note lesions on liver and fluid accumulation around the heart.

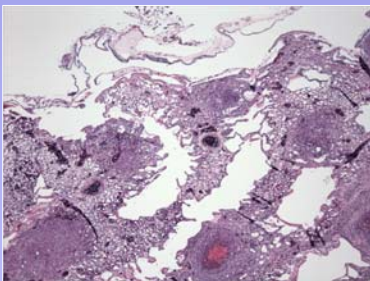


Figure 2

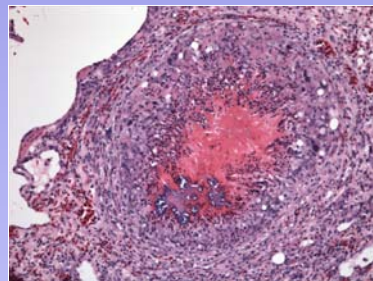


Figure 3

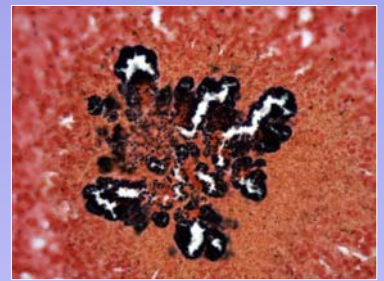


Figure 4 Gram Stain *Staphylococcus aureus*

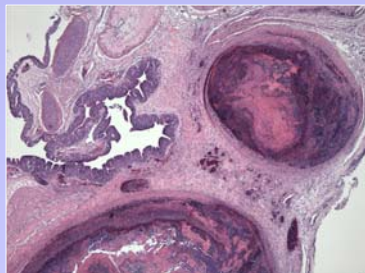


Figure 5

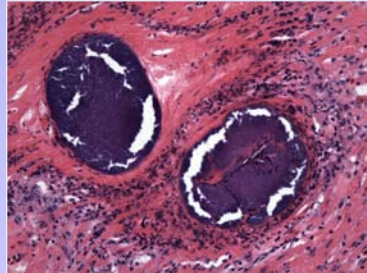


Figure 6

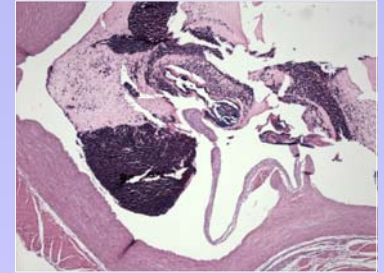


Figure 7

Discussion

- Emboli from valve lesions caused infarcts in vital organs due to congestion
- Speculation of source of infection: intravenously or through disturbance of epidermis through plucking of wing feathers
- Hematogenously spread from the heart, via the pulmonary artery, to the lungs, resulting in pneumonia

