

# Severe Atherosclerosis in African Grey Parrot

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## Abstract:

A 13 year old African Grey parrot was presented to a clinic for labored breathing. At necropsy the parrot's abdomen was distended and filled with a yellow-tinged, acellular, serous fluid. The pectoral muscle was bluish-reddish. The liver appeared shrunken, firmer than normal, purplish in color, and rounded at the edges. The heart was moderately enlarged. Major arteries were firmer than normal. The spleen was small and lungs were moderately reddened. Tissue samples were analyzed histologically and it was determined the parrot had severe atherosclerosis. The cause of atherosclerosis is thought to be due to genetic and dietary issues.

## Necropsy

- No external parasites
- Distended abdomen (50 ml of yellow-tinged, acellular, serous fluid)
- Good muscle mass
- Pectoral muscle: bluish-reddish (dehydration)
- Liver: appeared shrunken, firmer than normal, purplish in color, and rounded edges
- Heart: moderately enlarged
- Major arteries: firmer than normal
- Spleen: small
- Lungs: moderately reddened

## Conclusion

The African Grey died from heart failure due to severe atherosclerosis of the major arteries. Death could have been due to too much fat and cholesterol in the birds diet and African Grey's are also thought to be genetically predisposed to atherosclerosis. A Herpes Virus has been shown to induce atherosclerosis in chickens and quails but not yet in parrots. The mechanism of action is unknown for the ossification that occurred in the lung.

## History

On 11/08/2006, a 13 year old male African grey parrot was received for necropsy. The bird had a 2-3 day history of lethargy. The owner noticed labored breathing about two hours prior to visiting the clinic.

## Histopathology

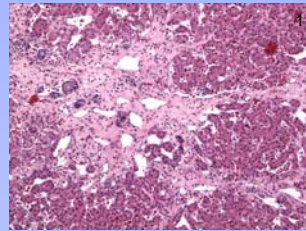


Figure 1: Fibrosis in the liver

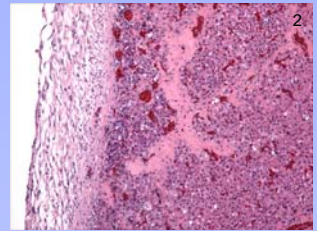


Figure 2: Capsular fibrosis of the liver

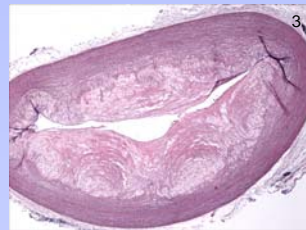


Figure 3: Atherosclerosis of great vessel

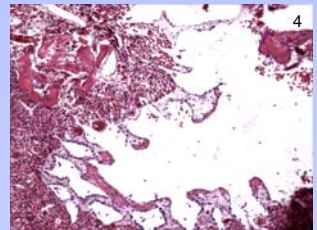


Figure 4: Ossification in the lung

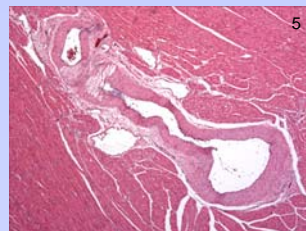


Figure 5: Atherosclerosis of vessel in heart

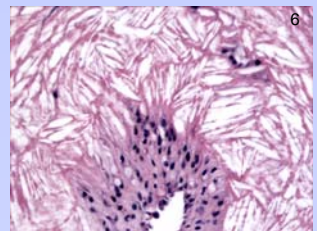


Figure 6: Cholesterol crystals in wall of vessel