Aspiration Pneumonia in a Macaw (*Ara Ararauna*)

M. Thangapandiyan, P. Jalantha, T. Mohanapriya, D. Rahane Sachin, S. Muthukrishnan and R. Sridhar

Department of Veterinary Pathology, Madras Veterinary College, Chennai 600 007.

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This is a record of aspiration pneumonia in an one month old Blue-gold Macaw.

Materials and Methods

A one-month-old Blue-gold Macaw (*Ara ararauna*) was presented for necropsy with the history of forced feeding from overnight by the owner. However, the next morning after one hour of forced feeding the bird was found dead and brought for necropsy. Representative portions of the lung and other organs were processed for haematoxylin and eosin staining.

Results and Discussion

On post mortem examination, trachea was filled with yellowish mucoid feed material and the mucosa was congested. Feed material was found up to the bronchi and extended into the lung. Lung was slightly congested and edematous. Pancreas was pale. Serosal vessels of the intestine and meningeal vessels were congested.

Trachea revealed deciliation and milk desquamation of the epithelium with submucosal congestion, haemorrhage and oedema and the presence of bacterial colonies.

Lung revealed dilatation of the parabronchus containing edematous fluid, cellular debris of lant origin with infiltration of lymphocytes. Disruption of the parabronchial wall and focal hyperplastic changes of the epithelium with infiltration of mononuclear cells were observed. Underlying capillaries were congested.

![Fig 1. Lung - Yellowish mucoid feed material in the trachea, bronchi extending into the olkijyrdlung parenchyma.](Image)

![Fig 2. Lung - dilated parabronchial lumen contained cellular debris of plant material and edematous fluid. H&E bar = 100 μm](Image)

*Corresponding author: Email : sugigold@gmail.com

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Kidney revealed focal degeneration and necrosis of the tubular epithelial cells. A few epithelial cells showed presence of proteinaceous casts. Intestine revealed degeneration and necrosis of the epithelium with infiltration of mononuclear cells in the lamina propria and submucosa. Spleen revealed diffuse necrosis of the lymphocytes. The heart revealed scattered multifocal hyalinised areas of muscle necrosis.

Baby birds usually aspirate because of incorrect feeding methods by inexperienced handlers. If a baby bird is fed liquid or a very thin solid feed, then that type of feed can easily make its way into the trachea. Overfeeding while the crop is full can also make the feed to get aspirated (Flammer and Clubb, 1994).

Here, aspiration pneumonia was diagnosed in a one-month-old Macaw, which showed signs of respiratory embarrassment and collapsed shortly after feeding. Similar finding was reported in an eleven-year-old Macaw (Bradley et al., 2003). The presence of liquid feed material within the trachea and bronchi with mild congestion and oedema of the lungs were the significant changes observed here, whereas Flammer and Clubb (loc. cit) reported prominent pulmonary lesions in addition to the above changes. Schmidt et al. (2003) observed that the presence of feed would elicit an inflammatory response with haemorrhage, congestion, fibrin accumulation and oedema in the lung as observed in this case.

References