Aspergillosis and Gastric Impaction in an Ostrich

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Abstract: It is inevitable to encounter many diseases of ostriches in Turkey as a consequence of the rapid expansion of ostrich farming and flocks in this country.

Aspergillus fumigatus was isolated from the lungs and air sacs of a 3-month-old, male, blue-neck ostrich. In postmortem examination, the ingestion of a large amount of gravel was noted. The accumulated gravel had led to an occlusion of the passage between the proventriculus and gizzard. This work appears to be the first report of aspergillosis and gastric impaction developing together and leading to death in an ostrich.

Key Words: Ostrich, aspergillosis, gastric impaction

Case History

A 3-month-old, male blue-neck ostrich was observed to be losing body condition. Clinical examination by the

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farm veterinarian failed to reveal the underlying problem.
In its history, it was reported that the chick was pecking
the food but was also losing weight and had recently
stopped pecking. Several antibiotic regimens were
administered but none of them caused any improvement.
The bird was found dead and was brought to the clinics
of the Veterinary Faculty of Ankara University for
diagnostic evaluation.

Results and Discussion
Postmortem examination showed typical fungal
lesions in the air sacs (Figure). It was consistent with
severe mycotic aircellulitis and pneumonitis. A scraping
was taken and cultured on Sabouraud dextrose agar
(SDA) medium and many hyphae were observed in direct
microscopy of the scraping. *Aspergillus fumigatus* was
isolated from the lungs and air sacs. However, the

Figure. *Aspergillus fumigatus* in air sacs of a 3-month-old, blue-neck ostrich.
presence of fungal hyphe was not observed in histopathological preparations. It has been reported that histological evidence of fungal infection was also negative in one study (6).

In postmortem examination, ingestion of gravel was also noted. A large amount of accumulated gravel had led to an occlusion of the passage between the proventriculus and gizzard. In our case, the stomach was full of only gravel and shell grit. This was also reported as a predisposing factor and can cause impaction (1). In a study two Aspergillus and three impaction cases were observed in postmortem examinations of 121 ostriches (7).

The findings of this report show that Aspergillosis and gastric impaction may cause death in ostrich chicks. To our knowledge, this appears to be the first report of aspergillosis and gastric impaction occurring together, and resulting in death in an ostrich. Since the popularity of ostriches is rising fast in Turkey, further studies and reports regarding the diseases related to these birds are needed.

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References