

Incidence of hyphema in peafowl (*Pavo cristatus*)

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Abstract

Wildlife SOS team rescued a Peahen of storm victim from a village near Agra with a history of severe trauma at head. Complete health examination revealed it to be case of hyphema. Parenteral and topical treatment using corticosteroids and antibiotics was provided to the bird for six consecutive days. Complete recovery was observed on 6th day. It was concluded that management and successful recovery in traumatic hyphema can be achieved by systemic and topical therapy. The blue peafowl (*Pavo cristatus*) was declared as a National Bird of India in 1963 and it is kept under Schedule I of Indian Wildlife Protection Act, 1972 so providing utmost importance is mandatory (Kushwaha and Akhilesh, 2016). The species is in least concern category in the international union for conservation of nature (IUCN) red list. The blue peafowl lives especially in dense forest, both wet and dry forest. However, these birds are adopted to agricultural region now a days and even found very close to human sites (Forshaw, 1998), such that they have water at hand. The peafowl are omnivorous with wild peafowls having vast range of food habits which includes plants, berry, seeds, insects and small creatures such as reptile and amphibians (Arshad *et. al.*, 2000; Chopra and kumar, 2014). Freeman *et. al.* (2008) mentioned that bird communities can be significantly affected by severe storms due to potential destruction of food resources. Any physical injury happened due to natural calamities will further increase the difficulties of their survivability. The illegal poaching for feathers, meat trade and mass mortality due to indiscriminate application of pesticides and herbicides in crop fields are remain as major causes of the recent decline in peafowl population (Ramesh and McGowan, 2009). In this article, we discussed about successful rescue and rehabilitation of an injured peahen of storm victim, which was rescued by Wildlife SOS rescue team at Agra.

Key Words: Eye injury, Hyphema, Peahen, Storm victim.

Case History, Observations and Discussion

Wildlife SOS team rescued a Peahen which is reported as storm victim from a village near Agra with a history of severe trauma at head. Complete health examination revealed that bird is suffering from impaired vision due to right sided buphthalmos and hyphema i.e. bleeding in the anterior chamber (Fig.1) (Jason Lavy, 2007). Radiological examination not revealed any bone fracture (Fig.5). Good vision is important in birds as it directly influence on flight, feeding and breeding (Bayon *et. al.*, 2007). Hyphema in peafowl is one of the important ocular issues which can cause partial to complete loss of vision if not treated properly thus predisposes the birds as easy prey.

Parenteral and topical treatment provided to the bird for six consecutive days. On day 0, bird was treated with injection dexamethasone @ 2 mg (Total dose), injection neurokind @ 0.4 ml (Total dose), injection gentamicin @ 5mg/kg.bwt. and topical eye drop Tobra D (Tobramycin + dexamethasone). Noureddin *et. al.* (2015) recommended topical and systemic corticosteroids to

increase patient comfort and decrease inflammation that accompanies hyphema. Same medication was repeated for six days and progress of bird noticed. Reduced buphthalmos, aggregation of RBC's in streak form towards dorsal aspect of anterior chamber (Fig.2) exposing ventral portion and improved response to menace reflex was observed on day 2. The menace reflex and blink reflex to visual threat was frequently used method for visual testing (Ballegoij *et. al.*, 2015). Remarkable reduction in buphthalmos and aggregated RBC's, exposing major part of pupil was noticed on day 4 (Fig. 3). Increased response was recorded to menace reflex suggesting that the bird was gaining its vision gradually. On 6th day, complete recovery was observed and redness of eye was totally vanished. However the bird was under observation for next five more days to ensure the complete recovery before release into suitable habitat.

Conclusion

Natural calamities are affecting the survivability of Indian peafowl by causing serious health issues or by



Fig. 1: Bleeding in anterior chamber of eye on Day 0.



Fig. 2: Aggregation of RBCs in streak form on Day 2.



Fig. 3: Remarkable reduction in RBCs on Day 4.



Fig. 4: Complete recovery on Day 6.



Fig. 5: Radiograph on Day 0.

destroying the food habits. Traumatic hyphema is one of them, hindering the proper vision and making the bird prone as a prey for predators. Management and successful recovery from the condition can be possible by systemic and topical approach.

References

- Amanda, N. D., Freeman, Kyle Pias and Vinson, M.F. 2008. The impact of tropical cyclone Larry on bird communities in fragments of the endangered rainforest type 5b. *Austral Ecology*, **33**: 532-40.
- Arshad, M.I.M., Zakaria, A.S., Sajap, A. and Ismail. 2000. Food and feeding habits of red jungle fowl. *Pakistan J. Biol. Sci.*, **3**: 1024-26.
- Baha'a N Nouredin, Karim Tomey and Barikian A. 2015. Glaucoma secondary to trauma. Section 7, Emergency care management, pp. 609-24.
- Chopra, G. and Kumar, T. 2014. Study of food and feeding habits of blue peafowl, *Pavo cristatus* Linnaeus, 1758 in district kurukh, Haryana (India). *IJRSB.*, **2**: 11-16.
- Forshaw, J and Krishner, D. 1998. Encyclopedia of birds. Unsw press.
- Jason Lavy. 2007. Ocular trauma. Part III, System approach, pp. 915-18.
- Ramesh K. and McGowan P. 2009. On the current status of Indian peafowl *Pavo cristatus* (Aves: Galliformes : Phasianidae): keeping the common species common. *Journal of threatened taxa*, February **1(2)**: 106-08.
- Kushwaha S. and Kumar A. 2016. A review on Indian peafowl (*Pavo cristatus*) Linnaeus, 1758. *Journal of wildlife research*, October-December, **4(4)**: 42-59.
- Wouter, J.C. van Ballegoij, Peter, J. Koehler and Bastiaan, C. Ter Meulen. 2015. The menace reflex. *Pract. Neurol*; **15**: 233-35.

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