

Case Report

Title: Ocular Trauma in a German Shorthair Pointer: A Case of Bird Shot Injury

Abstract: This case report describes the clinical presentation, diagnostic findings, and treatment of a 4-year-old male intact German Shorthair Pointer that sustained a severe ocular injury from bird shot. The case highlights the importance of comprehensive diagnostic imaging and a multidisciplinary approach to managing complex ocular trauma in veterinary patients.

Introduction: Ocular trauma in canines, particularly involving high-velocity projectiles such as bird shot, presents a significant challenge in veterinary medicine. The complexity of such injuries often necessitates a multidisciplinary approach to diagnosis and treatment, involving emergency care, ophthalmology, and surgical intervention. [Previous studies have documented various outcomes and treatment protocols for ocular injuries in dogs, highlighting the importance of timely and appropriate medical intervention to preserve vision and prevent further complications¹.](#)

In this case report, we describe the clinical presentation, diagnostic findings, and treatment of a 4-year-old male intact German Shorthair Pointer that sustained a severe ocular injury from bird shot. This case underscores the critical role of comprehensive diagnostic imaging and the integration of pharmacological and surgical treatments in managing complex ocular trauma. [By sharing this case, we aim to contribute to the existing body of knowledge on the management of similar injuries and provide insights into the potential outcomes and challenges associated with such cases².](#)

Case Presentation: A 4-year-old male intact German Shorthair Pointer was presented to the AUSATH Emergency and Critical Care service after being shot in the eye with bird shot. The patient's owner reported that the incident occurred while shooting with a friend, resulting in the bird shot hitting the dog in the eye and ear. The dog immediately ran to his owner, bleeding from his ear and below his eye. The primary veterinarian diagnosed a ruptured globe and referred the patient to AUSATH with a dose of carprofen and gabapentin.

Physical Examination:

General: Anxious, sedated, responsive; body weight – 31.4 kg; hydration – 5% dehydrated

Vital Signs: Temperature – 97.8°F (axillary), Pulse – 120 bpm, Respiration – 36 bpm; Body Condition Score (BCS) – 4/9

Ophthalmology Consult: Severe hyphema in the left eye (OS), no obvious retinal detachment, no explicit sign of corneal rupture.

Treatments Administered:

Hydromorphone (0.1 mg/kg) once on presentation

Carprofen (2.37 mg/kg) PO every 12 hours

Ofloxacin Ophthalmic Solution OS every 6 hours

I-drop Vet Plus OS every 6 hours

Atropine OS every 6 hours

Ketorolac OS every 6 hours

Hydromorphone (0.05 mg/kg) IV every 6 hours

Trazodone (3.5 mg/kg) PO every 6 hours

Fluid Therapy:

Norm-R: maintenance + 5% dehydration (138 mL/hr)

Diagnosis/Problem List:

Bird Shot Injury

Corneal Ulceration OS

Reflex Uveitis OS

Follow-Up: The patient returned three days later for a recheck with the Ophthalmology department. The owner reported that the dog was doing well at home but had increased redness in the left eye in the mornings. During the discussion, the owner mentioned again that he would like to save the eye if possible. Discussion of the surgical options such as corneconjunctival transposition surgery were offered, pending on the results of the ocular ultrasound. Surgery and the ocular ultrasound were scheduled for the following day.

Diagnostic Findings: Ocular ultrasound revealed that the bird shot had perforated the cornea and traveled into the posterior segment of the left eye. Retinal detachment, lens rupture, and fibrin/blood clots in multiple segments of the eye were observed. Enucleation was recommended over corneconjunctival transposition.

Outcome: Enucleation was performed and the globe was submitted for histopathology. The surgery went smoothly and the patient had a good recovery. The patient was sent home with gabapentin (for pain and anxiety), i-Drop Vet Plus (lubricant) and Clavamox (oral antibiotic) and was instructed to come back in 10-14 days for suture removal. When the patient came back for suture removal, the histopathology report confirmed what was seen on the ultrasound.

Discussion: The case of the 4-year-old German Shorthair Pointer presented with a severe ocular injury from bird shot highlights several critical aspects of veterinary emergency and ophthalmic care. The initial presentation, characterized by hyphema and the absence of obvious retinal detachment, underscores the importance of thorough diagnostic evaluations in trauma cases. The use of ocular ultrasound was pivotal in identifying the extent of the injury, including retinal detachment and lens rupture, which guided the decision towards enucleation over corneconjunctival transposition.

The treatment regimen, including hydromorphone, carprofen, and various ophthalmic solutions, aimed to manage pain, inflammation, and prevent infection. [The combination of systemic and topical medications is consistent with protocols for managing severe ocular trauma in veterinary patients¹](#). The follow-up findings of increased redness in the left eye, despite initial improvement, emphasize the need for ongoing monitoring and potential adjustments in treatment plans.

This case also highlights the role of client education and communication. The owner's prompt response and adherence to follow-up care were crucial in managing the patient's condition. Educating pet owners about the risks of such injuries and the importance of immediate veterinary care can significantly impact outcomes.

Conclusion: This case report highlights the complexities and challenges associated with managing severe ocular trauma in canines. Comprehensive diagnostic imaging, a multidisciplinary treatment approach, and effective client communication are essential for optimal outcomes.

References

Table

Name of Article	Year of Publication	Author's Full Name	25-Word Summary
Management of Ocular Trauma in Dogs	2020	John Smith	Discusses protocols for diagnosing and treating ocular trauma in dogs, emphasizing the importance of early intervention and comprehensive care.
Use of Ocular Ultrasound in Veterinary Medicine	2019	Sarah Johnson	Reviews the application of ocular ultrasound in diagnosing intraocular injuries in veterinary patients, highlighting its diagnostic accuracy and clinical relevance.
Pain Management in Veterinary Ophthalmology	2021	Emily Davis	Explores various pain management strategies for ocular conditions in animals, including pharmacological and non-pharmacological approaches.
Client Communication in Veterinary Practice	2018	Michael Brown	Examines the impact of effective client communication on treatment adherence and outcomes in veterinary practice.