



# Bilateral acute angle closure glaucoma following a snake bite: Are we missing it?

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## Abstract

**Introduction:** We report a case series of acute angle closure following snake bite, their clinical features, treatment, and the outcomes. **Materials and Methods:** Ocular examination was done in all the snake bite victims admitted over 1-year period. The systemic status, presenting intraocular pressure (IOP), treatment instituted, and outcomes were recorded for all cases of acute angle closure. **Results:** Six patients developed angle closure following snake bite. Average IOP was in the range of 32–56 mmHg. Treatment was initiated as for cases of acute angle closure. Two patients succumbed and the other four recovered, had normal IOP at follow-up. **Conclusion:** Acute angle closure glaucoma is a rare complication of snake bite. Timely detection and management will result in good visual prognosis. Treating physicians should be aware of this rare sight-threatening complication so that a preliminary ophthalmic examination can be sought and the visual morbidity be prevented.

**Keywords:** Acute angle closure, glaucoma, secondary angle closure, snake bite

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## Introduction

Poisonous snakes are found throughout the world, and snake bite is a major public health problem worldwide. Snake venom is a complex heterogeneous composition of substances and can have multiple systemic effects. However, ophthalmic complications in snake bite are rare.<sup>[1,2]</sup> Ocular manifestations of snake bite reported in literature range from direct injury to the eye leading to penetrating injuries with bite marks, conjunctival and corneal lacerations, subconjunctival hemorrhage, keratomalacia, hyphema, uveitis, acute angle closure glaucoma (ACG), optic neuritis, external ophthalmoplegia, vitreous hemorrhage, and endophthalmitis resulting in blindness.<sup>[3-7]</sup> A thorough review of literature shows isolated case reports describing ACG following a snake bite.<sup>[8,9]</sup> We report a case series of acute ACG following snake bite, their clinical characteristics, management, and outcomes observed over 1 year in a tertiary care center in India.

## Materials and Methods

The study was conducted in a tertiary eye care center in South India from January 2014 to December 2014. Institute ethics committee approval was obtained for the study. All patients with venomous snake bites admitted to the hospital during this 1 year period were included in the study. Demographic details such as age, gender were recorded. Information regarding the type of snake bite, time of presentation following the bite, systemic manifestations, treatment received, and the clinical outcome were recorded in all the cases. Ocular examination was done in all these patients admitted to the hospital emergency department bedside irrespective of their complaints as most of these patients were systemically unstable. Treatment was

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