Ocular Manifestation Of Spider Toxin-Long Term Sequela

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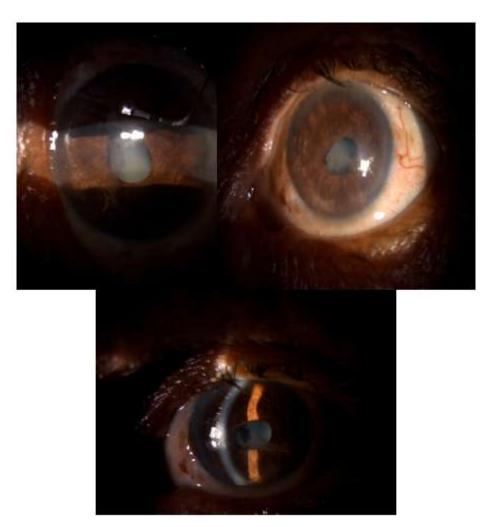
I. INTRODUCTION

There are more than 30,000 species of spiders, most of which cannot inflict serious bites to humans because of their delicate mouthparts and impotent or prey-specific venoms. However, some spiders produce toxic venoms that can cause skin lesions, systemic illnesses, and neurotoxicity. These bites usually progress to ulcerating dermonecrosis at the bite site⁽¹⁾Spider bites are not very common in India. They bite humans only when they are trapped or crushed against the skin.

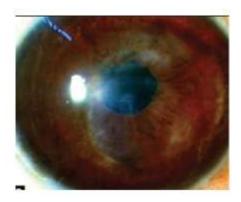
II. CASE REPORT

We report a rare case of 55-year-old female presented with complains of diminution of vision in left eye. she gave history of spider toxin entry into her left eye 3 years ago accidentally from bath towel which she squeezed and used.

On examination,her visual acuity was 6/36 in RE and 1/60 in LE. Therewasirregular old scars on left side of forehead. Ocularexamination showed mid stromal corneal opacity with posterior synechiae and anterior capsule of lens resembled true exfoliation with complicated cataract. Systemic condition of the patient was well.



She has undergone cataract surgery and irisclaw lens was implanted in view of deficient capsular support. Postoperative best corrected vision was 6/12.



III. DISCUSSION:

Commonly reported manifestations of spider venom are dermatologic, hematologic, nephrologic, musculoskeletal and neurologic ⁽²⁾. The diagnosis remains clinical, based on history provided by the patient. Spider bites, though common on extremities; ⁽³⁾ are rarely seen oneyelids ⁽⁴⁵⁶⁾. Localised envenomation hasvaried manifestations on eyelids. Taskesinet al ⁽⁷⁾ reported severe edema on eyelids and periorbital region with necrotic hemorrhagic lesion. The lesion healed with scarring and led to corneal irritation.

John S etal reported redness, discomfort, and blurred vision with central corneal swelling and an endothelial immune ring, without evidence of spider hairs after 5 weeks of bite and complete resolution after topical tobramycin and dexamethasone⁽⁸⁾.

Ashok jha et al reported vision loss due to unilateral optic atrophy following spider bite on eyelid⁽⁹⁾andDimosthenis et alreported bilateral optic neuropathy secondary to a brown recluse spider bite in the right index finger⁽¹⁰⁾.

The patient came to our hospital was for dimution of vision and spider bite sequela was an incidental finding. As no other ocular manifestations of delayed spider bite is reported, we presume that the cataract and corneal changes with forehead scars could all be related to spider bite. The importance of the current case lies in its unique ocular manifestation and excellent visual outcome following cataract surgery.

References

- [1]. Common Spider Bites.Diaz Jh, Leblanc Ke. Am Fam Physician. 2007 Mar 15;75(6):869-73. Pmid: 17390599
- [2]. DimosthenisMantopoulo, Andrew J. Hendershot, Colleen M. Cebulla, And David K. HirshBilateral Optic Neuropathy Following Bite From Brown Recluse Spider (*LoxoscelesReclusa*) Sivaperuman C, Rathore Ns.
- [3]. Spiders In The Desert National Park. Faunal Ecology And Conservation Of The Great Indian Desert. 2009, Pp 49-52
- [4]. Jarvis Rm, Neufeld Mv, Westfall Ct. Brown Recluse Spider Bite To The Eyelid. Ophthalmology 2000; 107:1492-96.
- [5]. BilgiliSg, Karadag As, Karadag R, Et Al. A Case Of Spider Bite Localized To The Eyelid.
- [6]. Cutaneous And Ocular Toxicology 2013; 32(1):83-5.
- [7]. Taşkesen M, Akdeniz S, Taş T, Et Al. A Rare Cause Of Severe PeriorbitalEdema And Dermonecrotic Ulcer Of The Eyelid In A Child: Brown Recluse Spider Bite. The Turkish Journal Of Pediatrics 2011;53:87-90.
- [8]. Delayed Endothelial Immune Ring After Brown Recluse Spider Bite. John S. Minkowski, Angela R. Scott Pictures & Perspectives | Volume 128, Issue 12, P1735, December 2021 Doi: Https://Doi.Org/10.1016/J.Ophtha.2021.04.014
- [9]. A Rare Cause Of Visual Loss Following Spider Bite. Ashok Jha, Alok Sati, Rishi Sharma.
- Doi: Https://Dx.Doi.Org/10.18535/Jmscr/V6i1.161Jmscr Jan 2018
- [10]. Bilateral Optic Neuropathy Follo, Wing Bite From Brown Recluse Spider (*LoxoscelesReclusa*)DimosthenisMantopoulo, Andrew J. Hendershot, Colleen M. Cebulla, And David K. Hirsh.