

Tick Infestation of The Eyelid in Turkey

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Abstract

We tried to mention a tick infestation of the superior eye lid of a six years old female patient consulted to our clinic. Slit lamp biomicroscopy was used to observe attached insect body at her eyelid margin. The tick was completely removed with forceps. The patient was examined systemically in order to exclude the tick borne diseases and none of the signs of the diseases were observed during follow-up. Herein, we report a child case with tick infestation of the eyelid in Turkey.

Keywords

tick; child; eyelid

Introduction

Ticks are small acarine ectoparasites (external parasites), which are adapted to blood sucking to obtain nutrition from mammals, birds, and sometimes reptiles and amphibians [1]. There are two classes of tick which are responsible for disease in humans: hard ticks (family Ixodidae) and soft ticks (family Argasidae) [2].

Ticks are excellent vectors of several pathogens, including bacteria, spirochetes, rickettsiae, protozoa, viruses, nematodes, and toxins and complete removal is important to prevent complications. These are the most seen tick borne diseases: Lyme borreliosis, Rocky Mountain spotted fever, tickborne encephalitis, tularaemia, Crimean–Congo hemorrhagic fever and Q fever [2]. There are few cases in the literature about tick infestation of the eyelid [1,3-9]. Herein, we report a case with Ixodes infestation of the eyelid in Turkey.

Case Presentation

Six years old female patient consulted our clinic with her mother because of an insect that was stucked to her right superior eye lid. The attached insect body was observed at her eyelid margin during slit lamp biomicroscopical examination (Figure 1).

There was not any edema, swelling or erythema except an eye lash attached to the superior eyelid of the patient. The examination of the conjunctiva and cornea was normal. Pain or another complaint were not taken from her medical history. There was not the history of travel or contact with animals.

The tick was removed from her superior eyelid and consulted to dermatology clinic for the systemic infestation. There was no residual tick parts on the eyelid. We made the diagnosis of tick after observing the insect body attached to eye lid margin. She was treated with topical moxifloxacin 0.5%

ophthalmic solution (Vigamox, Alcon Inc.) 4 times daily to the affected eye. The patient was examined systemically in order to exclude the tick borne diseases and none of the signs of the diseases were observed during follow-up.

Discussion

Tick commonly localizes at the orifices of the meibomus glands of the eye lids in eye and its surrounding. Some clinical problems like conjunctivitis, uveitis, keratitis and vasculitis could be seen because of the infestation of the humans [5]. The ticks may be diagnosed easier than the other parasites infestations because of their large bodies.

Although some other methods (chemical agents) are defined to get out from ticks up until now, the most easier method is the mechanical removing of them from the areas that are infested [7,9]. A proper forceps is the most suitable device to remove them if we think about the toxic affects of the chemical agents to the eyes. The most important point at that time is the complete extraction of the buried head of the tick from the skin. If any part of the tick remains in the body, this part must be removed en bloc with the peripheral skin.

The tick was removed as one-piece in our case so an additional surgical procedure was not needed. Any other sign of the infestation was not encountered during follow-up of the patient. The most important time for the transmission of the tick borne diseases is the first 24 hours [10].

Routine antibiotic prophylaxis need is a conflicting evidence. Although a discussion of evidence is not the scope of this article, routine antibiotic prophylaxis was not recommended by the most experts of the Centers for Disease Control and Prevention and the Infectious Diseases Society of America. We used moxifloxacin 0.5% ophthalmic solution in our patient. However, antibiotic use should be considered in patients who are at high-risk, in pregnant patients, and in patients living in areas endemic for tick-borne diseases[10].



Figure 1: The attached insect body was observed at her eyelid margin

The most important point to prevent exposure of the skin to the tick outside especially at the endemic places. However there are some differences in eye infestation from the other parts of the body. The tick should be removed as one-piece in the experienced centers as soon as the diagnosis is made rather than the protection because the tick generally infests in the night during sleep.

References

1. Singh M, Gopalakrishnakone P, Yeoh RL. Ixodes tick infestation of the eyelid of a child. *Can J Ophthalmol*. 2006;41:783-784.
2. Pitches DW. Removal of ticks: a review of the literature. *Euro Surveill*. 2006;11:3027.
3. McLeod BK. Sheep tick in the eyelid. *Br J Ophthalmol* 1986;70:75-76.
4. Keklikçi U, Unlü K, Cakmak A, Akdeniz S, Akpolat N. Tick infestation of the eyelid: a case report in a child. *Turk J Pediatr*. 2009;51:172-173.
5. Santos-Bueso E, Calvo-Gonzalez C, Diaz-Valle D, Benitez-del-Castillo JM, Garcia-Sanchez J. Eyelid tick bite. *Arch Soc Esp Oftalmol*. 2006;81:173-175.
6. Holak H, Holak N, Huzarska M, Holak S. Tick inoculation in an eyelid region: report on five cases with one complication of the orbital myositis associated with Lyme borreliosis. *Klin Oczna*. 2006;108:220-224.
7. Samaha A, Green WR, Traboulsi EI, Ma'luf R. Tick infestation of the eyelid. *Am J Ophthalmol*. 1998;125:263-264.
8. Bode D, Speicher P, Harlan H. A seed tick infestation of the conjunctiva: *Amblyomma mericanum* larva. *Ann Ophthalmol*. 1987;19:63-64.
9. Jensen LA, Snow RL, Clifford CM. Spinose ear tick, *Otobius megnini*, attached to the conjunctiva of a child's eye. *J Parasitol* 1982;68:528.
10. Gammons M, Salam G. Tick removal. *Am Fam Physician*. 2002;66:643-645.

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