



Minor Bite that Can Lead to Major Morbidity – A Case Report

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ABSTRACT

Ticks are presently considered to be one of the common vectors of human infectious diseases in the world, second only to mosquitoes. Some of the transmitted infectious diseases are innocuous but many are deleterious to the host. The ticks should be carefully removed from the host by means of forceps so as to not leave mouth parts. The tick bites should thus always be considered in any sudden appearing lesion with a history of environmental contact. The preventive measures should be taken up. We present here a case report of a hard tick bite to emphasize the need to keep in mind this condition for prompt diagnosis and the need for careful removal of ticks and follow up for tick borne diseases.

KEYWORDS : Hard tick, bites, vector

Introduction

Ticks are presently considered to be one of the common vectors of human infectious diseases in the world, second only to mosquitoes¹. Some of the transmitted infectious diseases are innocuous but many are deleterious to the host. Ticks are small arachnids of approximately 850 different species which are present worldwide. They hide in low bushes that which helps them for physical contact with the host². We present here a case report of a hard tick bite to emphasize the need to keep in mind this condition for prompt diagnosis and the need for careful removal of ticks and follow up for tick borne diseases.

Case Report

A 23 year old female, a student came with complaints of multiple itchy lumps all over the body for the past 1 day. She gave history of camping outside overnight. There was no history of associated fever. Dermatological examination revealed the presence of multiple ticks over the back, abdomen, forearms and legs with the head embedded in the skin (Figure 1,2).



Figure 2: Tick on the back

Few lesions showed surrounding erythema. All parts of the body were examined for any left out ticks. The tick was carefully removed whole with the help of forceps and examined under microscope. It was found to be a hard tick of Ixodidae (Figure 3).



Figure 1: tick on the abdomen



Figure 3: Hard tick with scutum

The patient was started on anti-histamines for itching and prophylactic oral doxycycline 100 mg twice a day for 10 days and was kept on follow up for 30 days to check for development of any tick borne infections.

Discussion

Ticks are blood sucking ectoparasites that are important vectors for human and animal diseases. Two types of ticks, hard and soft are present differentiated by the presence of plate on the back called scutum and visible mouth parts. It has 4 life stages which are the egg, larva, nymph and adult. The adult female breeds on host and lays eggs in soil which again hatch to larvae and continue the cycle. The transmission of various diseases depends on many factors like the duration of the tick in the host and whether the tick is infected or not³. The diseases that they transmit are varied and include Lyme's disease, rickettsiosis, Rocky mountain spotted fever, ehrlichiosis, tularemia, flaccid paralysis which are not common in our country⁴. Local allergic foreign body reaction to retained mouth parts and even anaphylaxis can occur due to tick bites⁵. The ticks should be carefully removed with fine forceps without squeezing its body. Stretching of the skin will facilitate the total removal of the tick⁵. The patients should be monitored for other signs of systemic involvement. The various preventive measures include use of insect repellants, body hygiene, insecticides and full removal of the tick.

Conclusion

Thus tick bites should always be considered in any sudden appearing lesion with a history of environmental contact. The emphasis is on the correct diagnosis, complete removal of the tick in view of the potential infections that can be transmitted. The preventive measures are to be taken to prevent recurrences and tick borne morbidities.

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