

## Tick bite

Sir,

A 23-year-old girl presented to our department with a 1 month history of an embedded tick on her right clavicle. The patient had no fever, chills or other systemic symptoms. Physical examination revealed a live tick that was stuck very firmly to the skin of the right clavicle area and was seen to swing its feet [Figure 1a]. Erythema was noticed around the attachment site [Figure 1a]. Initial laboratory investigations were unremarkable. To avoid leaving the mouthparts of the tick embedded in the skin, a limited skin surgical excision including epidermis and dermis of diameter and depth of 4 mm to 6 mm of the entire area around the bite was performed to remove



**Figure 1: (a) A live tick stuck to the skin of right clavicle area (b) Histological examination of the tick in the skin (H and E, x4)**

it completely. Histopathological examination showed a tick body full of blood with the mouthpart embedded in the upper dermis, with necrotized skin tissue around it [Figure 1b]. Vessel dilatation and neutrophil infiltrate in the dermis were also observed [Figure 1b].

Ticks are blood feeding external parasites which can cause local and systemic complications, including Lyme disease, tick-borne-encephalitis, tick-borne lymphadenopathy, secondary bacterial skin infection, reactive manifestations against tick allergens and granuloma formation.<sup>[1]</sup> During 3 months of follow-up, our patient did not show any systemic symptoms indicating that she just suffered a tick bite but did not acquire any tick-transmitted diseases.

Any tick found should be immediately and completely removed alive. Many methods of tick removal have been reported in the literature. Topical application of 2% erythromycin and 3% tetracycline preparations are ineffective in eliminating *Borrelia burgdorferi* from the tick bite site or in preventing dissemination to other tissues.<sup>[2]</sup> Limited surgical excision is an appropriate and safe tick removal technique and could remove the tick completely<sup>[3]</sup> without provoking the escape of infective body fluids from the tick into the wound site.

Persons who have undergone tick removal should be monitored for up to 30 days for signs and symptoms of tick-borne diseases. Tick numbers and tick-borne diseases should be regularly monitored in areas with a high risk of tick attacks.

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