functions, inflammatory markers (CRP, ESR), cerebrospinal fluid analysis and MRI scan of brain were normal.

The presence of unusual triad of hypersomnolence, hyperphagia associated with abnormal behaviour as the predominant symptoms, in the presence of negative investigations lead to the clinical diagnosis of Kleine-Levin syndrome in this child.

Kleine-Levin syndrome (KLS) is a rare but relatively benign syndrome characterised by recurrent episodes of hypersomnia and at least one of the following symptoms: (1) cognitive or mood disturbances, (2) megaphagia with compulsive eating; (3) hypersexuality with inappropriate behaviours; and (4) abnormal behaviour [1]. These episodes are separated by weeks or months of normal sleep and behaviour. Though originally described only in adolescent males, rarely young females are affected. A complete syndrome is the occurrence of hypersomnia, megaphagia and the various psychic manifestations. However atypical and incomplete forms are described. The episodes occur suddenly and last for several days to weeks, and cease abruptly. The interparoxysmal periods last several days to months, sometimes even to several years. Duration of each symptomatic period reduce over the years. The exact pathogenesis is not completely understood. A disorder of the diencephalon with episodic diffuse brain hypoperfusion, a viral aetiology due to associated flu like symptoms or autoimmune basis due to association with certain HLA types are postulated [2,3].

Many therapeutic agents such as stimulants, mood stabilisers, amphetamines and neuroleptics have been used, but definite benefit is yet to be established. With increasing age, frequency of these episodes gradually decrease. Therefore management during each episode is primarily supportive and educational [4].

References

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To the Editors:

Intra-aural ecdysis of Dermacentor auratus Supino, 1897, in a human host

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Reports on otoacariasis (intra-aural tick infestations) are common at ear, nose and throat (ENT) clinics in Sri Lanka [1, 2]. Dermacentor auratus (Acarina: Ixodidae) is the most commonly reported tick species associated with human otoacariasis [1]. It has a three-host life cycle involving different host species for each stage of its life cycle (larva, nymph and adult), and is distributed throughout the oriental region. The wild pig is one of the major hosts for adult D. auratus, and it also parasitizes a number of mammals (domestic pig, bear, rhinoceros and deer) as well as reptiles (python). Larvae feed mainly on Rattus spp. and carnivores. The nymphal stages have been known to infest man [1, 3]. Here we report an unusual occurrence of an intra-aural ecdysis of a male D. auratus nymph stage, into an adult within the human host.

The specimen was collected from the ear canal of a 51 year old female who complained of an earache and sought treatment at the Kandy General Hospital. The specimen was removed by an ENT specialist and preserved in 95% ethanol. The specimen was identified under light microscopy as an adult male D. auratus. It had an intact nymphal cuticle at the time of collection (Figure 1).

Although D. auratus is a three-host tick, it may go through a two-host life cycle as well, and therefore, ecdysis within an ear canal may not be surprising.
Prolonged attachment and ecdysis within the ear canal can increase the severity of damages caused by ticks. These could be perforation or rupture of the tympanum, suppurative otitis, luxation of the incudomallear or incudostapedial joints, dislocation of the stapes from the oval window and/or bleeding from the ear canal. The continuous secretion of tick toxins may produce facial palsy. Tick bites also increase the risk of pathogen transmission to the human host, as *D. auratus* is known to carry many pathogens such as *Rickettsia sp.*, orbivirus and Omsk hemorrhagic fever virus and Kyasanur forest disease virus [4].

Pathogen transmission by ticks has not had much attention in Sri Lanka and *D. auratus*, has not been incriminated as a vector of disease before. However, given its potential to transmit diseases, it will be an interesting area for further studies, especially to understand its role as a vector of human diseases in Sri Lanka.

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**References**


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