Lyme Disease and Common Vector Borne Illnesses: Common Presentations of Dental and Orofacial Pain

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LYME DISEASE AND COMMON CO-INFECTIONS

- Borreliosis (Lyme Disease)
- Bartonella
- Babesiosis
- Ehrlichiosis

COMMON PRESENTATIONS AND COMPLAINTS

Manifestations of tick-borne illnesses are frequently seen by dental practitioners as they mimic odontogenic and orofacial pain.

- Migratory dental pain in otherwise normal dentition
- Atraumatic temporomandibular joint pain, dysfunction and/or inflammation
- Global joint pain and swelling, including the temporomandibular joints
- Masticatory muscle pain (generalized global myalgia)
- Sore throat
- Burning mouth
- Intraoral ulcerations (autoimmune-like)

Risk Factors

- Exposure to tick bites when outdoors in endemic areas
- Contact with pets from endemic areas
- Failure to achieve a prompt diagnosis and treatment

Prevention

- Use protective clothing when outdoors in endemic areas
- Use insect repellent
- Shower after an outing and inspect for ticks
- Remove ticks promptly with a fine pointed tweezers placed on the mouth parts not the head or body
- Wash the area with alcohol
- Do not handle the tick, save it for analysis
- Look for an erythema migrans (EM) rash (Not seen in many cases)

ASSOCIATED SIGNS AND SYMPTOMS DISCLOSED DURING HISTORY

- Fatique
- Visual disturbances, blurred vision
- Lymphadenopathy
- Impaired Sleep
- Cognitive impairment, problems with concentration, short term memory
- Mood swings

- Polyarthralgia, pain, swelling, arthritis
- Polymyalgia, weakness, pain
- Neuropathy, trigeminal neuralgia, facial nerve palsy, peripheral neuropathies
- Headache
- Cardiac dysfunction, irregular heartbeat



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MANAGEMENT OF LYME DISEASE AND VECTOR BORNE ILLNESS

- Prevention is the key
- Early detection is essential
- Empirical treatment of patients with tick bite indicated when the probability of B. Burgdorferi infection after a tick bite is high
- Definitive diagnosis, often misdiagnosed as autoimmune disease, Chronic Fatigue Syndrome (CFS), Epstein Barr Virus (EBV), Fibromyalgia Syndrome (FMS)
- Oral antibiotics
- Intravenous antibiotics
- Length of treatment varies from patient to patient
- The diagnosis of LD is based on clinical findings, and may be confirmed by laboratory tests. Laboratory tests are not completely reliable.
- Dental treatment must be palliative, non-invasive and reversible in the absence of clear indications for treatment of dental pathology.
- Treatment of temporomandibular disorders and TMJ pain must also be conservative as many complaints resolve with treatment of the primary systemic disorder.

