

KISS: Lyme Disease

References: [PHE 2015](#), [CKS 2015](#), for guidance in Scotland see [NHS Highland Lyme](#)

Lyme disease, increasingly called Lyme borreliosis, is now endemic throughout the UK. There are between 2,000 & 3,000 confirmed cases in England & Wales each year & the number of cases is increasing. Ticks that carry Lyme are found throughout the UK, mostly April to October.

Symptoms

- Erythema migrans rash (circular rash with central clearing; often mistaken as ringworm!)
 - Occurs 3-30 days after infection; 1:3 patients do not get rash
 - Absence of rash or rash but no recollection of a tick bite does not exclude the diagnosis
- Non specific flu like symptoms
 - aching, fever, headache, joint pain, sweating, fatigue, light and sound sensitivity
- Early (within 3 months) systemic borreliosis causing meningitis or cranial nerve palsies (rare, but important to consider Lyme in the differential diagnosis of an acute Bell's palsy or single neuropathy), arthritis (consider if unexplained monoarthritis, especially knee or wrist) or carditis causing heart block (very rare, but needs urgent cardiology referral)

Diagnosis

- If erythema migrans rash present: **treat immediately as Lyme, blood test not needed**
- If rash is absent, but there is a credible history of tick exposure and other symptoms suggestive of Lyme disease **check blood for antibodies:**
 - Send serum for antibodies to *Borrelia burgdoferi* to NHS laboratory
 - If test positive then treat as Lyme disease
 - If negative, but symptoms persist, send repeat sample 3-4 weeks after initial test. Treat as Lyme disease if subsequent test is positive
- If diagnosis is uncertain, or neurological symptoms exist, consider discussing with Rare Imported Pathogen Laboratory RIPL) on 01980 612348

Treatment

- **Early treatment is important to avoid late complications**
- Oral doxycycline 100mg bd, amoxicillin 500mg tds or cefuroxime axetil 500mg bd for 14 days
- If facial palsy or other complications, longer 3 to 4 week course
- Doxycycline contraindicated in pregnant & breast feeding women and children under 12

'Post treatment Lyme disease syndrome'

- Subject of new research as persistent symptoms after treatment are common. Symptoms may persist for several weeks after treatment. If symptoms get worse or persist, repeat serology as relapse has been documented. Consider other causes and refer for relevant specialist advice.

Advice for patients: [NHS Lyme information](#) and [Lyme Disease Action](#) contain helpful guidance for patients, including tick removal advice