Tick Bites and Lyme Disease

NICE NG95 Lyme Disease (2018) | UKHSA Guidance

ACTION: Call 999 / Immediate A&E

- ☐ Syncope, near-syncope, chest pain, or breathlessness after tick bite: possible complete heart block
- ☐ Severe headache with neck stiffness or altered consciousness: possible Lyme meningitis
- ☐ Rapidly progressive neurological deficit or stroke features following a tick bite
- ☐ Collapse or unable to maintain airway

Do not refer these patients to GP to wait for an appointment. Stable facial nerve palsy without collapse or meningism: amber pathway.

ACTION: Refer to GP Same Day

- ☐ Expanding red rash at or near a bite site: erythema migrans. Not usually itchy, hot or painful. Refer same-day: treatment should not wait for blood tests
- ☐ Bullseye (central clearing) OR uniform expanding oval OR bruise-like expanding mark on darker skin
- ☐ New stable facial nerve palsy, limb paraesthesia, or radicular pain after tick exposure: same-day GP or 111
- ☐ Flu-like illness with fever, fatigue, headache, or migratory joint pain days to weeks after a tick bite
- ☐ Child or young person under 18 with symptoms beyond a single erythema migrans lesion: specialist via GP

Pharmacy First: tick bites and erythema migrans are excluded from infected insect bite PGDs 4a (flucloxacillin), 4b (clarithromycin), and 4c (erythromycin). Do not supply any of these antibiotics under the PGDs for a suspected tick bite or erythema migrans.

TICKS: Assessment Framework

T	**Time attached and removal**	Longer attachment = greater risk, but attachment duration alone does not indicate antibiotics in UK practice. Correct removal: fine tweezers, steady upward pull, no twisting.
I	**Inspect the bite site**	Local bite reactions appear quickly and settle within 48 hrs. Erythema migrans appears later, expands over days, and is not usually itchy, hot or painful. Advise patient to photograph and mark edge with pen.
C	**Check systemic symptoms**	Fever, fatigue, joint or muscle aches, facial drooping, palpitations, or limb tingling since the bite?
K	**Key sign: expanding rash = GP today**	Erythema migrans does not need a bullseye. Any expanding mark at a bite site: refer same-day, do not monitor.
S	**Serious features: two-tier**	Call 999/A&E for: collapse, syncope, chest pain, breathlessness, meningism, rapid neuro deficit. Same-day GP/111 for: stable facial palsy, paraesthesia, radicular pain.

SELF-CARE: No Rash, No Symptoms

- ☐ Tick removed correctly (advise now if needed: fine tweezers, steady pull, no twisting)
- ☐ No expanding rash, no systemic symptoms: monitor bite site daily for up to 3 months
- ☐ See GP without delay if any expanding rash or systemic symptoms develop
- ☐ Do not use private tick testing to guide treatment: diagnosis is based on symptoms, not tick test results

Do not supply or recommend antibiotics. Prophylactic antibiotics after a tick bite are not recommended in the UK (NICE NG95).

Key reminders: Erythema migrans is not usually itchy, hot or painful and continues to expand: a settling bite reaction within 48 hours is reassuring; an expanding mark is not. Lyme disease can occur without a remembered tick bite: nymph-stage ticks are tiny and bites are painless. Blood tests may be negative early: if suspicion remains after a negative ELISA, NICE recommends a repeat test 4-6 weeks later.