



Public Health
England

Lyme disease conference

Complex Lyme cases: the ID physician's view

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Complex Lyme cases: the ID physician's view

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- o Joint neurological ID/CFS
- o About 20-30 pa but increasing
- o Localised Lyme Disease (already covered)
 - o Treat on clinical diagnosis (14 days)
 - o Serology often not positive
- o Disseminated LD (mainly neurological)
- o Not LD (mainly CFS)

Presentation of LD

- o 89% erythema migrans
- o 5% arthritis
- o 3% neurological presentation
- o 2% lymphocytoma
- o 1% acrodermatitis
- o <1% cardiac

Huppertz et al. Eur J Clin Microbiol Infect Dis 1999

Late Lyme Disease

- o Skin
- o Cardiac
- o Neurological

Skin manifestations

- o Skin –
acrodermatitis
chronica atrophica
(ACA). Rare. Mainly
women. Associated
with B.afzeli



Cardiac Lyme Disease

- o Rhythm or conduction disturbances
- o Myocarditis
- o Pericarditis

Extremely rare

Other causes should be sought

Stanek, Wormser et al. Lancet 2011

Early neurological Lyme Disease

- o Lymphocytic meningitis
- o Unilateral or bilateral cranial nerve involvement (especially VII)
- o Radiculopathy

All 3 may occur together. Ataxia, encephalitis and peripheral neuropathy are much rarer. Weeks to months after bite

Late Neurological Lyme Disease

- As for early manifestations
- Possibly more neuropathy and encephalitis ??
- MS type picture but MRI negative

All very rare

Treatment of Lyme Disease

- o Primary localised Lyme (EM)
 - o Doxycycline 100 mg bd 14 days
 - o alternatives are amoxicillin, oral cefuroxime (500 mg tds/bd for 14 days)
 - o Azithromycin – shorter duration (10 days) but not recommended in US

Pre and post treatment serology may be negative

Treatment of Lyme Disease

- o Isolated cranial nerve palsy
 - o Doxycycline 100 mg bd 14 days
- o Late neurological LD or acute meningoencephalitis or advanced AV block
 - o Ceftriaxone 2 g od for 14-28 days.

IDSA 2006 (Rvd 2011) BIA 2011

Clinic experience

- o Tertiary Neuro ID and CFS clinic
- o 115 patients over 5 years to 2010
 - o 23% Lyme Disease
 - o 33% Chronic Fatigue Syndrome
 - o 33% No definite diagnosis
 - o 11% alternative medical diagnosis

Cottle, Miller et al QJM 2011

Chronic Lyme Disease

- o Confusing term because it can refer to
 - o Late disseminated disease
 - o Post Lyme disease treatment syndrome
 - o Those untreated for LD
 - o Those treated for LD with new symptoms
 - o Those with no evidence of LD (ever)

Post treatment LD Syndrome (PTLDS)

- o Can affect 10-20% of those treated with LD.
 - o Fatigue, pain myalgia, arthralgia
- o Aetiology/pathogenesis uncertain
 - o Comparison with other post infective syndromes – Rheum fever, GBS, Reiters ,?CFS
- o No evidence of benefit from prolonged antibiotics

Arguments against Chronic LD

- o No resistance reported
- o No objective lab evidence of inflammation
- o Not consistent with other spirochaetal infections
- o Antibody levels decline despite persistent symptoms
- o No biofilm, poor penetrance or other indication for prolonging treatment
- o No response to further courses

Halperin. Neurology 2007

Non NHS management

- o 26 patients (23%) had visited “non NHS” clinics
- o 22 (85%) had been diagnosed with LD and 9 with “co-infections” – including cryptosporidium, chronic candida and babesia
- o 15 had negative serology at reference lab (others not done)
- o None had LD diagnosed at our clinic (17 had CFS)
- o 16 patients had had 53 courses of antimicrobials

Summary

- o Complex LD presents with specific symptom complex
 - o Skin, joints, cardiac, neurological
- o Serology is usually positive and diagnosis based on epidemiological exposure, clinical syndrome and positive serology
- o Antibiotic treatment is usually effective and is either doxycycline or ceftriaxone for 14-28 days
- o Many patients receive inappropriate diagnoses and treatment (often in non NHS settings)
- o Pathogenesis of Post Treatment LD Syndrome remains obscure but no evidence for prolonged antibiotics



Questions



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