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

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

Late Lyme Disease

- Skin
- Cardiac
- Neurological
Skin manifestations

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

- Rhythm or conduction disturbances
- Myocarditis
- Pericarditis

Extremely rare
Other causes should be sought

Stanek, Wormser et al. Lancet 2011
Early neurological Lyme Disease

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

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

Pre and post treatment serology may be negative
Treatment of Lyme Disease

- Isolated cranial nerve palsy
  - Doxycycline 100 mg bd 14 days

- Late neurological LD or acute meningoencephalitis or advanced AV block
  - Ceftriaxone 2 g od for 14-28 days.

IDSA 2006 (Rvd 2011) BIA 2011
Clinic experience

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

Cottle, Miller et al QJM 2011
Chronic Lyme Disease

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

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

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

Non NHS management

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

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