

This is a joint statement from the Infectious Diseases Society of Ireland (IDSI) and the Irish Society of Clinical Microbiology (ISCM) on the diagnosis and treatment of Lyme diseases in Ireland.

Lyme Disease is a systemic, tick-borne disease caused by the bacteria *Borrelia burgdorferi* resulting commonly in skin rash, and less frequently in rheumatologic, neurologic, and cardiac abnormalities. The most common clinical marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients<sup>1</sup>.

IDSI and ISCM endorse the Infectious Diseases Society of America (IDSA) clinical practice guidelines relating to the diagnosis and clinical management of Lyme disease<sup>2</sup>. Updated IDSA guidelines are being developed and they will be reviewed by both societies upon their publication.

IDSI/ISCM advocate tick prevention strategies for those who reside in Lyme endemic areas including avoiding areas of long grass or thicket; wearing long sleeved shirts and trousers when outdoors, using insect repellents, and regularly and thoroughly checking for ticks.

IDSI/ISCM support the use of the two-tiered Lyme testing algorithm, as recommended by the Centres for Disease Control and Prevention (CDC) and currently utilised within the HSE, with the support of the Lyme Borreliosis Service at Public Health England (PHE), for the diagnosis of Lyme disease requiring treatment. IDSI does not endorse the use of non-validated diagnostic assays for detection of Lyme disease; specifically IDSI believes that the use of experimental immunoassays, Elispot or indirect immune profiling of patients samples, cannot currently be reliably used in the diagnosis and management of people with suspected Lyme disease. The current two tier testing is endorsed by the ISCM.

The majority of Lyme disease cases are treated with short courses (10 – 28 days) of antibiotics. Despite multiple studies there is no evidence that longer courses of antibiotics are beneficial and prolonged antibiotics are associated with potentially serious and occasionally life-threatening complications.

IDSI/ISCM concur with IDSA's viewpoint that no reliable evidence exists supporting the designation of Lyme disease as a chronic infectious disease requiring ongoing antibiotic therapy.

IDSI/ISCM acknowledge that the pathogen that causes Lyme disease in Europe is somewhat different to that described in the USA. However the same short course antibiotic regimens have been shown to be effective in Europe. In addition the IDSA recommendations for treatment are in agreement with those of the European Federation of Neurological Societies and the British Infection Association.

IDSI/ISCM advocate for ongoing high quality epidemiological and scientific research into Lyme disease in Ireland. We also recognise that many people report chronic symptoms that are attributed to 'post Lyme Disease syndrome' for which treatment is supportive as, presently, there is no evidence-based treatment. Studies of prolonged courses of antibiotic therapy in this cohort of patients have shown no benefit.

## References

1. CDC website 2018
2. *Clin Inf Dis* 2006; 43 (9) 1089 – 1134

