

Poster / Ongoing study with preliminary results**Management of tick bites and suspicion of Lyme disease in Belgian primary care :
compliance with national guidelines**

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Keywords: national guidelines, Lyme disease, tick bite, management of infection**Background:**

Lyme disease is the most common tick-borne disease in Europe. Diagnosis is confirmed upon Erythema Migrans (EM) appearance, or serology testing. Suspicion of Lyme disease linked to other clinical manifestations than EM should be verified by serology. Only symptomatic confirmed cases require prescription of antibiotics.

Research questions:

The objective is to assess GP's compliance with 2017 Belgian national guidelines regarding tick bite and Lyme disease suspicion.

Method:

A 6-year retrospective population-based study based on data collected by the Belgian network of Sentinel General Practices (SGP). GPs report on a case-by-case basis using an online questionnaire. Data from 2015 to 2020 were analyzed.

Results:

During the study period, 1618 cases were reported. In our sample, 47.9% patients were female and 52.1% male. 74.7% of tick bites occurred in Belgium. Majority of patients had Erythema Migrans (35.8%) or no symptoms (45.8%). Other clinical manifestations, such as arthritis (4.9%), less common.

Serology test for Lyme disease was ordered by GPs for 32.8% of patients with EM, 83.8% of patients with arthritis, 90% of patients with neurological symptoms, 57.1% of patients with carditis, 39.6% of patients with other symptoms and 14.2% of patients without symptoms. Antibiotics (doxycycline or amoxicillin) were prescribed in 92.6% of patients when symptom was EM, 62.5% for arthritis, 65% for neurological symptoms, 71.4% for carditis and 7.7% in asymptomatic patients.

Conclusions:

This study yields recent data on tick bites and Lyme disease in general practice in Belgium. GPs were not completely compliant with current national guidelines. Indeed, serology was ordered by GPs when patients had EM as symptom (32.8%) against national recommendations. Moreover, serology was not always used to verify suspicion of infection. Furthermore, some GPs prescribed antibiotics to asymptomatic patients. Compliance and knowledge regarding the national guideline should be investigated further by conducting semi-structured interviews and running a pre-post analysis.

Points for discussion:

GPs' compliance with national guidelines

Barriers to comply with guidelines

Appropriate management of tick bite and suspicion of lyme disease