Persistent infection with Lyme disease may cause hepatitis, or inflammation of the liver. Publishing their findings in Research Open Access, scientists wrote about a 53-year-old woman with persistent Lyme disease who developed acute hepatitis along with raised liver enzyme levels while taking antibiotic treatment for Lyme.

Ticks spread Lyme disease to humans by transmitting Borrelia burgdorferi, which is a corkscrew-shaped bacteria known as a spirochete. Investigating the woman’s granulomatous hepatitis, researchers took a liver biopsy and found evidence of active Borrelia burgdorferi infection there, which corresponded to evidence of the infection found in blood samples. The investigators ruled out other causes of hepatitis in the woman.

“Our findings show that persistent infection can cause problems in Lyme disease,” Marianne Middelveen, MSc, of the International Lyme and Associated Diseases Society in Bethesda, Maryland, and lead author of the study, said in a release. “We have used sophisticated diagnostic techniques to show that the Lyme spirochete can attack the liver despite antibiotic therapy.”

“The presence of the Lyme spirochete in blood and liver tissue supports persistent infection,” said Peter Mayne, MBBS, of the Sydney Lyme Clinic in Australia. “It looks like antibiotic treatment failed to eradicate the disease in this patient.”

“The CDC keeps asking for ‘credible scientific evidence’ that persistent infection may cause problems in these patients,” said Raphael Stricker, MD, of Union Square Medical Associates in San Francisco. “We have delivered that evidence on a silver platter.”

To read the release, click here.

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