

ECCMID 2019

Abstract Poster #P1516

Session: PS084 - Zoonoses: from animal to human

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Recurrent fever episodes caused by *Candidatus Neoehrlichia mikurensis* in a patient diagnosed with B cell lymphoma and status post splenectomy

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Background: *Candidatus Neoehrlichia mikurensis* (CNM) is a tick-borne bacterium first identified as a human pathogen in 2010. In the few existing case reports, it has been associated with prolonged fever episodes, vascular events and skin manifestations in immunocompromised patients.

Case report:

A 48 year old male was admitted to our ID department in 03/2017 with recurrent fever episodes for the last 4 months. The patient had been diagnosed with a B-cell NHL in 10/2016 and had been treated with three cycles of chemotherapy. Following a splenectomy in 10/2016, the lymphoma was stated to be in remission. On admission, he reported periodic fever episodes up to 40°C, weight loss > 10kg and a general fatigue, presenting an overall reduced appearance. The medical history was empty but for a DVT under anticoagulation and a hip replacement in 2000. There was no travel history outside of Europe. Prior to admission the patient had been treated with piperacillin/tazobactam, meropenem and clindamycin without clinical improvement. Laboratory tests showed undulating white blood cells counts and slightly elevated PCT levels. The extensive work up included X-rays of chest and hip, MRI, TEE and a PET-CT scan, all without evidence of an infectious focus. Several sets of blood cultures were taken, which remained sterile. The patient was empirically started on levofloxacin and prednisolone. After initial improvement he was discharged under oral levofloxacin, but readmitted with fevers > 40°C and chills shortly after. New blood cultures were collected and treatment was switched to ceftriaxone without clinical improvement. CNM was finally detected in a blood sample by the help of a PCR assay and sequence analysis of the 16s rRNA. Subsequently, therapy was switched to oral doxycycline 200mg. A follow up after 6 weeks of treatment showed a drastic improvement and weight gain and a negative PCR control for CNM.

Conclusions:

CNM probably remains an underdiagnosed pathogen as it cannot be cultivated. In patients with recurrent fever episodes and immunosuppression, molecular analysis of blood samples should be included in the work up when blood cultures remain sterile.

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