LETTER TO THE EDITOR

II Bogoch, S Chakrabarti, JS Keystone. African tick bite fever presenting as exudative pharyngitis. Can J Infect Dis Med Microbiol 2013;24(2):65-66.

To the Editor,

A 29-year-old woman presented to our Tropical Medicine Unit with a fever after returning from one month in Malawi. Two weeks before her presentation, she noted a small 1 cm × 1 cm 'bite' on her left inner thigh that appeared mildly erythematous and raised. Seven days later, she developed fevers, malaise, headaches, odynophagia and myalgias. A local physician suspected a furuncular staphylococcal infection and prescribed cloxacillin for six days. Her symptoms transiently improved; however, they returned shortly before her return to Canada. She was evaluated in our Tropical Medicine Unit two days after her return with a chief complaint of severe odynophagia. Her examination was notable for a fever of 38°C with marked exudative erythema in the posterior pharynx and tonsillar pillars. Subcentimetre mobile lymphadenopathy was palpated in the cervical region. A small eschar was noted on her right inner thigh (Figure 1), with local subcentimetre right-sided inguinal lymphadenopathy and a palpable spleen tip.

She received pretravel advice in a travel clinic and was up to date on vaccinations including typhoid, and hepatitis A and hepatitis B. She reported perfect adherence to her atovaquone/proguanil malaria prophylaxis, but noted multiple insect bites while abroad. She denied any sexual contacts and consumed only bottled water. African tick bite fever was suspected concomitant with a bacterial pharyngeal infection. She was empirically treated with doxycycline (100 mg twice daily) and amoxicillin (500 mg three times daily). Her initial pharyngeal culture for group A streptococcus was negative and a second culture was performed and inoculated on media appropriate for gonococcus, group A streptococcus and anaerobic infections with the aim of also ruling out groups C and G streptococci. Her amoxicillin was empirically changed to cefixime at this time over concerns for a possible gonococcal infection.

A complete blood count, electrolyte, renal and liver function tests were all within normal limits. Her immunoglobulin (Ig) M for Rickettsial infection was positive at the Ontario provincial reference laboratory, suggesting a diagnosis of African tick bite fever. Two blood and three malaria screens (thick smear, thin smear and BinaxNow Malaria Test [Binax, USA]) were negative. Acute Epstein-Barr virus infection (mono-spot and blood polymerase chain reaction negative) and cytomegalovirus (CMV) infection (CMV immunoglobulin (Ig) M and polymerase chain reaction negative) were ruled out. In addition, acute and chronic infection with toxoplasmosis (IgM and IgG negative) and HIV (ELISA, Western blot and RNA polymerase chain reaction negative) were also ruled out. Testing was not performed for adenovirus, human herpes virus 6, or herpes simplex virus 1 or 2. The patient made a full recovery with doxycycline therapy after one week.

The present case was unique in that African tick bite fever presented as a severe exudative pharyngitis and mononucleosis-like syndrome. The patient presented with fever, lymphadenopathy and a palpable spleen tip. Previous case series demonstrate that fever is the most common clinical finding apparent in 59% to 100% of individuals. Other symptoms include headache (62% to 83%), myalgias (63% to 87%), eschar (53% to 100%), regional lymphadenopathy (43% to 100%) (1-5), maculopapular rash (26%) (6) and aphthous stomatitis (10%) (6). In addition, Rickettsial infections have demonstrated features of mononucleosis-like syndromes, but a severe

Figure 1) An eschar or 'tache noire', visualized on right inner thigh

exudative pharyngitis has not been reported as a component of this although splenomegaly has been seen (7). Major viral and bacterial etiologies of pharyngitis and mononucleosis-like syndromes were ruled out in our patient including group A streptococcus, gonococcus, anaerobic infections, acute Epstein-Barr, CMV, toxoplasmosis and HIV. Clinicians should be aware that exudative pharyngitis and a mononucleosis-like syndrome may be a manifestation of African tick bite fever, and a careful physical examination for an eschar can aid in this diagnosis.

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