Image challenge

A man with bilateral inguinal lymphadenopathy

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Clinical introduction

A 37-year-old man with past history of lymph node tuberculosis presented with bilateral inguinal swelling with night sweats but no fever since two weeks. He had a cat but without history of scratches. He had an extra conjugal sexual intercourse few weeks before. Physical examination revealed a 5cm tender, erythematous and painfull bilateral inguinal adenopathy (figure 1a) and a small ulceration at the base of the penis (figure 1b). Vital signs were normal. Labs investigations showed, CRP 26.0mg/l, white blood cell 11590/mm3.

Question

What is the most likely diagnosis ?

A. Toxoplasmosis

B. Tuberculosis

C. Cat-scratch disease

D. Lymphogranuloma venereum

E : Syphilis

Answer: C

Toxoplasmosis, syphillis and tuberculosis associated lymph node are generally painless so these diagnosis can be ruled out. Since lymph node were bilateral Cat-scratch disease was unlileky.

The most likely diagnosis for us was Lymphogranuloma venereum (history of extra conjugal sex, bilateral inflammatory lymp nodes). It is a sexually transmitted disease caused by Chlamydia trachomatis serovar L that must be consider in sexually active patient[1]. He was treated by Doxycycline 100mg twice dailly orally for 21 days.

Unexpectedly, PCR (polymerase chain reaction) for Chlamydia trachomatis (on urine, rectum and oropharynx) was negative. Lymph node biopsy was performed and PCR for Bartonella henselae was positive. Bartonella henselae's serology (IgG) showed a titer greater than 1/1280 and the diagnosis of Cat-scratch disease was retained. Note that the serology for HIV, Syphilis were negative.

Cat-scratch disease is caused by Bartonella henselae. Human infection is transmitted by bites or scratches of infected cats. 3 to 10 days after inoculation a primary skin lesion, a vesicle, appears at the scratch site. In the next 2 weeks, a regional unilateral lymhadenomegaly in the lymph draining region of the scracth occurs in 85 percent of patients. Usually, cat-scratch disease is self-limited and resolves within a median of 7weeks. Unusual form like endocarditis, fever of unknown origin, visceral involvement or bilateral inguinal lymphadenopathy have been described[2]. The diagnostic method of choice is serology with titers greather than 1:256 strongly suggesting an active or recent infection. The recommendation do not support the use of antibiotics in immunocompetent patient for the treatment of typical cat-scratch disease. However, treatment should be considered for patient with large and bulky lymphadenopathy and also in disseminated or hepatosplenic diseases[3].

References:

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[2] Orden AO, Nardi NN, Vilaseca AB, et al. Cat scratch disease during etanercept therapy in a rheumatoid arthritis patient. Reumatol Clin. 2017 Feb 27 (Epub ahead of print)

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Figures legend :

Figure 1a : inguinal lymphadenopathy

Figure 1b : ulceration at the base of the penis