



Enfermedades Infecciosas y Microbiología Clínica

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Diagnosis at first sight

A woman with lip lesion and submandibular lymphadenopathy

Mujer con lesión labial y adenopatía submandibular

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Clinical description of the case

A 35-year-old female presented with complaints of a 5-day history of a wound on lip and progressive right submandibular swelling. Her physician prescribed a 7-day course of amoxicillin clavulanate (2 g/daily) for possible bacterial infection. Due to the lack of improvement, she was admitted to our department with unresolved sore and submandibular lymphadenopathy. Physical examination revealed a papule on the buccal surface of the swollen lower lip and a tender lymphadenopathy in the right submandibular region (Fig. 1). Other examinations were normal. Fever was 36.5 °C and laboratory values showed a total white blood cells count of 6500 cells/McL, with 70% neutrophils, C-reactive protein: 15 mg/L (0–5), sedimentation rate: 30 mm/h. Chest X-ray film was normal and a tuberculin skin test with purified protein derivative showed no induration. Urinalysis, basic chemistry, and hepatic function testing results were within normal limits. Serologies for syphilis, human immunodeficiency virus, Epstein–Barr virus, Hepatitis B virus, Toxoplasmosis, Cytomegalovirus, Herpes simplex type 1 and 2 remained unremarkable.



Fig. 1. A papule on the buccal surface of the lower lip and a swollen submandibular lymph node.

Diagnosis and evolution

In detailed medical history, the patient recalled being injured on his lip by a kitten a month ago. Since she likes to play with cats and she has been in close contact with them for years, the patient did not consider the lesions to be related to this injury. Therefore, serological studies for *Bartonella* spp. were submitted. With the results pending, the patient was administered a 5-day regimen of azithromycin for suspected cat-scratch disease (CSD). The mass decreased in size and lymph node enlargement gradually resolved within 10 days. Blood results were positive for *Bartonella henselae* by indirect fluorescence assay with immunoglobulin G titers of 1:512. The skin lesion healed without scarring. The patient has been doing well without recurrence for 3 months.

CSD is a localized cutaneous and lymph node disorder and can present atypical manifestations such as lip involvement.¹ It often begins with a papule which usually develops 3–10 days after the introduction of the organism into the skin. This primary lesion typically persists for a period ranging from a few days to several months. One to two weeks later, regional lymphadenopathy develops and is commonly unilateral. Although it usually resolves in 1–4 months, but persistence of enlarged nodes have been reported for years. Diagnosis is based on a complete history, a physical exam, and sometimes blood tests. Risk factors includes being around cats on a routine basis, especially kittens that are more playful and apt to accidentally scratch and bite. Sometimes, patients may not state their exposure because it is one of their daily activities. Therefore, a history of exposure to cats is crucial for a diagnosis of CSD, as in our patient. Most CSD are self-limited and do not require medical therapy.² In some cases, treatment with antibiotics including

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azithromycin is an effective choice and can shorten the duration of symptoms.³

In conclusion, in such cases presenting with skin lesions and ipsilateral lymphadenopathy, a history of cat exposure should be sought for suspected CSD.

Conflict of interest

There is no conflict of interest.

References

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