CASE STUDY

101. Cat Scratch Disease in a Low-Prevalence Region: A Case Report from Bangladesh.

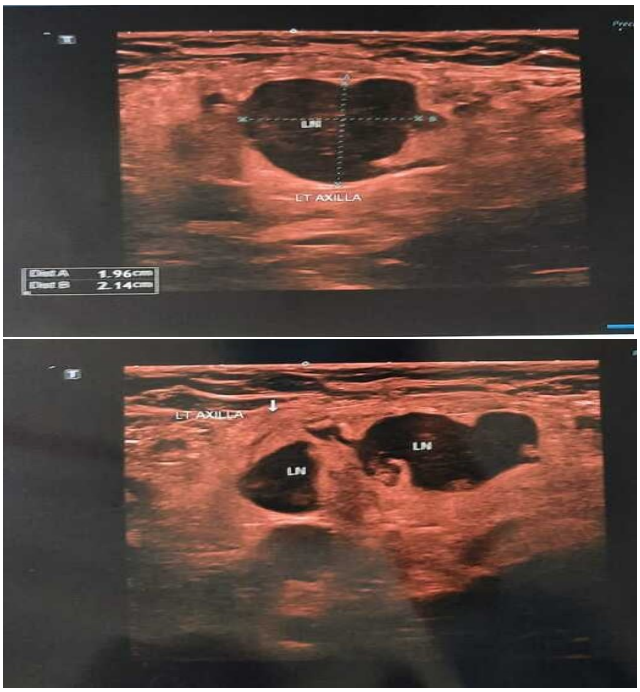
Mahnoor Fatima,[1] Forhad Hossain,[2] Karma Dicky Sherpa,[2] Ahmed Al Montasir,[2] Md. Zakir Hossain.[2]
[1] Shaheed Ziaur Rahman Medical College, Bangladesh
[2] TMSS Medical College, Bangladesh

Background: Cat Scratch Disease (CSD), caused by gram-negative bacillus Bartonella henselae, is transmitted through cat scratches or bites, leading to regional lymphadenopathy, fever, and malaise. It is self-limiting but can result in severe complications in immunocompromised patients, including bacillary angiomatosis or encephalitis. In South Asia, including Bangladesh, the prevalence of CSD is not well-understood due to scarce data, and it is often misdiagnosed because of its similarities to other illnesses, such as tuberculosis. Diagnostic tools like fine-needle aspiration cytology (FNAC), serologic tests (IFA and ELISA), and imaging are essential for accurate identification. A study in Bangladesh between 2018 and 2020 revealed that 15.1% of healthy cats carry Bartonella spp., confirming the risk of CSD in the area. This report discusses a previously healthy 38-year-old female with persistent axillary swelling following a recent cat scratch.

The Case: A 38-year-old female with no significant past medical history and no prior history of tuberculosis or malignancies presented to the medicine outpatient department (OPD) with complaints of swelling in the left axillary region. The swelling was accompanied by mild pain localized to the left axilla, malaise, and a low-grade fever persisting intermittently for about one week, ranging from 101 to 102°F. Upon history taking, the patient reported an incident of being scratched by a cat on her left wrist and forearm six weeks back. The cat was non vaccinated, and showed features of diminished appetite before and after the scratching episode. Two weeks after the scratch, she began to notice swelling in her left axilla, which progressively increased in size over the next four weeks. The patient denied any complaints of cough, shortness of breath, or weight loss. She reported maintaining a good appetite throughout the illness. Primary care physician made a differential diagnosis of lymphoma and tuberculosis and carried out relevant investigations except FNAC. Notable physical examination findings were localized tenderness and swelling of the left axillary lymph nodes. No signs of organomegaly were noted, and laboratory investigations showed no abnormalities that would suggest any of the differentials set by the primary care physician. Ultrasonogram of lymph nodes showed hypoechoic, oval, asymmetric masses with central hyperemia and possibly fluid collection and hyperechoic hilum (Figure 1). FNAC revealed granulomas with palisading epithelioid histiocytes and central neutrophils, along with a polymorphic cell population. Although confirmatory molecular (PCR) or serological (ELISA/IFA) testing for Bartonella henselae was not performed due to limited availability in the region, the diagnosis of Cat Scratch Disease was made based on clinical history, FNAC findings, and exclusion of other differential diagnoses. Azithromycin was started in oral form and her recovery was uneventful. Informed consent was obtained from the patient for publication of this case report.

Conclusion: This case emphasizes the need for clinical suspicion of CSD in patients presenting with regional lymphadenopathy, particularly those with a history of cat exposure. The lack of advanced diagnostic tools in resource-limited settings, such as Bangladesh and India, contributes to substantial underdiagnosis. Early recognition and appropriate antibiotic therapy can prevent misdiagnosis and unnecessary investigations and interventions.

Figure 1. Ultrasound of an Axillary Lymph Node Showing Inflammatory Features.



Legend: The oval shaped axillary lymph nodes are appearing hypoechoic than the surrounding tissue on ultrasound, indicating inflammation or fluid. Increased blood flow within the lymph node, visualized as a hyperechoic or brighter area, is a characteristic feature. Hilum is hyperechoic and asymmetrically located.

ISSN 2076-6327

This journal is published by Pitt Open Library Publishing