

Bartonella henselae

Bartonella henselae is a gram-negative, pleomorphic bacilli that can cause cat scratch fever and bacillary angiomatosis. Cat scratch fever, as the name suggests, often occurs after a cat bite or scratch and is characterized by fever and lymphadenopathy. Bacillary angiomatosis is characterized by the abnormal proliferation of blood vessels that form tumor-like masses in the skin and other organs. It is commonly seen in people with AIDS, and is rarely seen in the immunocompetent. The cutaneous skin manifestation can include vascular appearing red papules or nodules to purple nodules that look very similar to Kaposi sarcoma, which also occurs in AIDS patients. Unlike Kaposi sarcoma, bacillary angiomatosis is a benign disease that can be treated with antibiotics. Kaposi sarcoma can be differentiated from bacillary angiomatosis by biopsy. Bartonella can also lead to reactive arthritis, though it is a rare occurrence, and usually occurs in those who are HLA-B27 positive. Splenitis and hepatitis may be caused by the non-caseating granulomas which can be formed.



PLAY PICMONIC

Characteristics

Gram-Negative

Graham-cracker Negative-devil

This bacterium stains gram negative due to the relatively thin peptidoglycan layer in the cell wall.

Pleomorphic

Playdough-morphic-jar

This bacteria is commonly described as a pleomorphic bacteria, which means the organism can take on multiple structural forms.

Bacillus

Rod

This bacteria has a rod shape.

Signs and Symptoms

Cat Scratch Fever

Cat Scratching Fever-beaver

Cat scratch fever, as the name suggests, often occurs after a cat bite or scratch and is characterized by fever and lymphadenopathy.

Lymphadenopathy

Lymph-lime-add (+)

Lymphadenopathy, which is swelling of the lymph nodes, is a common finding in cat scratch fever.

Bacillary Angiomatosis

Bat Angel

Bacillary angiomatosis is characterized by the abnormal proliferation of blood vessels that form tumor-like masses in the skin and other organs caused by the organism Bartonella henselae.



Patients with AIDS

Band-AIDS

Bacillary angiomatosis is commonly seen in people with AIDS, and is rarely seen in the immunocompetent.

Mimics Kaposi Sarcoma

Mime Cape Shark-comb

Kaposi sarcoma is a tumor caused by human herpesvirus 8, which can present with purple cutaneous lesions. Kaposi sarcoma may be difficult to distinguish from bacillary angiomatosis upon physical exam and can be distinguished by biopsy.

Benign

Bunny

Unlike Kaposi's sarcoma, bacillary angiomatosis is a benign disease that can be treated with antibiotics. This disease can be fatal without treatment, however, and should be addressed immediately.

Reactive Arthritis

Reaction King-arthur

Bartonella can rarely cause reactive arthritis, and this usually occurs in HLA-B27 positive patients.

Non-Caseating Granuloma

Nun-cheese-eating Granny-llama

Infection with Bartonella henselae can also lead to necrotizing, non-caseating granulomas. This can lead to complications such as granulomatous hepatitis and splenitis.