

## 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.