**Category:** Feline

**Cat scratch disease, Bartonella henselae**

*Cat scratch disease or fever*

**Affected Animals:**
Humans. Cats carry the bacteria, but typically do not get sick from it.

**Overview:**
Individuals with compromised immune systems who are thinking about bringing a kitten into their home may want to first have the animal's blood cultured for Bartonella henselae, the bacteria that causes cat scratch disease.

Cats can act as carriers, without being ill themselves, and can pass on the disease when they scratch or bite people. The wound does not have to be very deep to do its damage — still, washing bites or scratches immediately with anti-bacterial soap is an important step in helping prevent the illness from occurring.

Relatively healthy individuals can become sick from Bartonella henselae; however, their symptoms are usually mild and disappear within a few weeks or months. As a precautionary measure, it is recommended that people who have poorly functioning immune systems, due to disease, other disorders, or chemotherapy, avoid kittens and young cats — and, if they do get bitten or scratched, they should seek medical attention as soon as possible.

**Clinical Signs:**
Cats typically do not show signs of sickness when they are infected with *Bartonella henselae*. People who contract the bacteria through a bite wound or scratch develop an erythematous papule at the site of the wound. In three to 10 days, lymphadenopathy may develop. People with the disease may also experience fever, anorexia, malaise, headache, myalgia, arthralgia, nausea, and skin eruptions. Most cases of cat scratch disease are self-limiting, but may take several months to resolve.

**Symptoms:**
Cats typically do not show signs of sickness when they are infected with *Bartonella henselae*. People who contract the bacteria through a bite or a scratch develop a raised, reddened area at the site of the wound. Three to 10 days later, their lymph nodes may become very tender and swollen. Those afflicted with the illness may develop a mild fever, lose weight, develop red, raised bumps on their skin, and experience flu-like symptoms such as headaches, pain in the muscles and joints, and nausea. Most cases of
cat scratch disease will resolve spontaneously; however, this can take several months.

**Description:**
*Bartonella henselae* is a gram-negative bacterium that is passed on to kittens and young cats by fleas, or possibly other biting insects. Older cats generally do not carry *Bartonella henselae* because their immune systems are well developed and better able to clear the infection. Kittens and young cats usually do not get sick from the bacteria, but humans can become seriously ill when bitten or scratched by an infected cat.

Cat scratch disease is especially threatening to people with compromised immune systems; for them, symptoms of the illness may remain for an extended period of time. Individuals with normal immune systems, however, are usually resistant to infection, or are able to fight off the bacteria in a couple of weeks to months.

**Diagnosis:**
A physician may diagnose a person with cat scratch disease if he or she has been scratched by a kitten or young cat recently, and is experiencing the symptoms associated with the illness. A definitive diagnosis can be made once a sample of the person's blood has tested positive for antibodies to the organism, or blood or tissue has cultured positive for the bacteria, *Bartonella henselae*.

**Prognosis:**
The prognosis is generally good for humans who develop cat scratch disease. It may take months for the bacteria to be completely eliminated from the body, but severe complications are rare. People tend to develop a life-long immunity to the bacteria once they have been infected. In immunosuppressed individuals, the disease can be very serious and may require prolonged treatment.

**Transmission or Cause:**
Cat scratch fever is caused by the bacterium, *Bartonella henselae*, which is transmitted to humans when bitten or scratched by an infected kitten or cat. Other methods of transmission are currently being researched.

**Treatment:**
Antibiotic protocols that eliminate the bacteria from infected cats have not been clearly established. A variety of antibiotics have been used to treat the illness in people and have been quite effective in treating certain forms of infection. In other forms, the antibiotics will control the disease but not clear it completely. A physician should be consulted if the disease is suspected.

**Prevention:**
Thoroughly wash all cat scratches and bites no matter how small they appear. Do not allow individuals with poor immune systems to play with kittens or young cats. Take special care to prevent cats from coming into contact with open wounds. Control fleas in the environment because they transmit the bacteria to cats and are currently under investigation as possible vectors in transmitting the bacteria directly to humans.