### NATIONAL VETERINARY LABORATORY



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### **NEWSLETTER**

Feline Bartonella Incidence: Reasons to Test All Cats for Bartonella®

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### In This Issue:

The winter issue of the NVL Newsletter will review and update the *Bartonella* diseases of cats and humans. Several new human *Bartonella* diseases, and a new *Bartonella* species in cats, have been described during the last 3 years.

### Newly Described Human Diseases Caused by *Bartonella*:

In addition to the previously described human *Bartonella* diseases, several new clinical syndromes have been found to be associated with *Bartonella*. It appears that the list of human *Bartonella* diseases will continue to grow because of increased awareness by physicians around the world.

### **Newly Described Human Diseases:**

Inflammatory bowel disease
Mononucleosis-like syndrome
Pulmonary infiltrates
Meningoencephalitis
Arthralgia
Juvenile arthritis
Cutaneous rash- Henoch-Schenlein purpura
Cutaneous granuloma annulare
Disciform keratitis

### **Previously Described Human Diseases:**

Cat Scratch Disease
Bacillary angiomatosis
Bacillary peliosis
Febrile bacteremia
Lymphadenopathy
Endocarditis
Vegetative valvular disease
Uveitis
Neurological disorders
Anemia
Neuroretinitis
Osteomyelitis

Parinaud's oculoglandular syndrome

### New Feline Bartonella Data:

### A New Bartonella Species:

A new *Bartonella* species has been found in cats, *B. weissii*. Our Fe*Bart*® *Bartonella* test will detect the presence of all four cat *Bartonella* species: (as of 4/06 six *Bartonella* species exist in cats).

Bartonella henselae Bartonella clarridgeiae Bartonella koehlerae Bartonella weissii

### **Prevalence Studies:**

#### Stray or "Shelter Cats":

Bartonella infection is significantly higher in stray cats and cats adopted from shelters or rescue organizations. The reason for this high prevalence is due to an increased chance of infestation with fleas compared to household cats.

### Table 1

### Stray or "Shelter Cats" Bartonella Incidence- USA:

	<u>% In</u>	<u>fect</u> ed
Stray cats	14,083/29,631	48%
Shelter cats US	A: 14,791/27,599	42%
Minnesota	11/59	18%
New Jersey	1,226/3,306	37%
California	683/1,207	57%
Florida	430/658	65%
Cats with fleas	14,791/27,599	54%
Updated 11/5/07		

### **Recommendation:**

FeBart® test all cats that originated as strays or were adopted from a shelter or rescue organization. Institute rigorous flea control. FeLV and FIV tests should also be performed.

### Incidence of *Bartonella* in Multi-Cat Households:

Cats living with other cats, in multi-cat households, are at greater risk for various infectious agents including FeLV, FIV, and *Bartonella*. We have tested 596 cats, living in multi-cat households, from throughout the USA. The prevalence of infection is higher in healthy cats living with *Bartonella*-infected cats than in cats living in single cat households.

#### Table 2

Bartonella Infection in Exposed Cats Living with a Bartonella-Infected Cat in Multi-Cat Households- USA

% Infected

 $\begin{array}{ccc} \text{Healthy cats in multi-cat households:} \\ \text{Exposed} & 2,437/4,613 & \textbf{53\%} \\ \text{Non-exposed} & 4,515/12,459 & \textbf{36\%} \\ \text{Healthy cats in single cat households:} \\ & 985/3,218 & \textbf{31\%} \end{array}$ 

Updated 11/5/07

### **Recommendation:**

FeBart® test all cats in multicat households when a cat is found to be infected with Bartonella. Treat only infected cats. Do not treat exposed cats unless their Bartonella status is known.

### References:

Bartonella references can be obtained at: www.nlm.nih.gov/

## Feline Oral Diseases and *Bartonella* infection:

#### **Incidence:**

40 to 60% (depending on the region of the USA) of cats with gingivitis, stomatitis, and oral ulcers are infected with *Bartonella*.

### Recommendations: "Test-Treat-Prevent"

- 1. Test all cats with oral disease for *Bartonella*, FeLV and FIV infection.
- 2. Fleas and ticks transmit *Bartonella* among cats. We recommend testing cats to determine those that have been infected.
- 3. Test healthy cats for *Bartonella* infection in order to treat infected cats to prevent the development of these common feline oral diseases.

### **Bartonella** Therapy:

Azithromycin: 10 mg/kg orally, once daily

for 21 days.

Rifampin: 10 mg/kg orally, once daily

for 21 days.

Doxycycline: 10 mg/kg orally, BID for 6

weeks.

**Flea control-** It is essential to eliminate fleas from the cat and the cat's environment.

#### Cats with oral disease:

Perform the required dental procedure and treat with azithromycin.

### Healthy infected cats:

Treat with azithromycin.

Cat owners should be cautioned to avoid being scratched or bitten while treating their infected cats. Several veterinary pharmacies (see list below) will prepare azithromycin in tuna, chicken or bacon flavored liquid form for therapy (2- 10 ml bottles containing 50mg/ml- give 1 ml daily for the average 10-12 lb adult cat). The second bottle should be obtained fresh after the first bottle has been used since the shelf-life for liquid azithromycin is only 10 days. Liquid azithromycin is easier to administer than capsules and thus is safer for the cat owner.

BCP Pharmacy	TX	713-771-1144
Liberty Drugs	NY	718-843-4477
Pet Health Pharmacy	AZ	800-742-0516
Pharmacy Creations	NJ	973-328-8756
Professional Pharmacy	CT	800-272-3008
Wedgewood Pharmacy	NJ	800-331-8272

# Gingivitis, stomatitis, and oral ulcers are common and perplexing problems in cats.





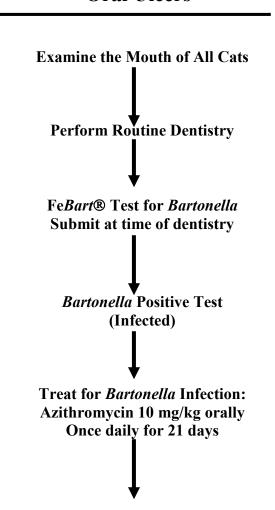


Gingivitis

Stomatitis

Oral Ulcei

# Management of *Bartonella*- induced Feline Gingivitis, Stomatitis and Oral Ulcers



Evaluate Therapy:
Re-examine mouth
3 weeks after end of therapy
(approximately 6 weeks after dentistry)