



**Halifax  
Veterinary Centre  
Referral Services**

205 Bridge Street  
Nelson  
Ph: 03 5483871  
Fax: 03 5481712  
Email: [info@halifaxvet.co.nz](mailto:info@halifaxvet.co.nz)

# The Cutting Edge

Welcome to the first edition of our quarterly referral newsletter. We hope you find the content of interest and helpful.

## CASE REPORT Feline Progressive Dendritic Histiocytosis

Katie, a 5.5-year-old female spayed domestic short-hair cat present to the Halifax Vet Centre with a two week history of skin lumps under her

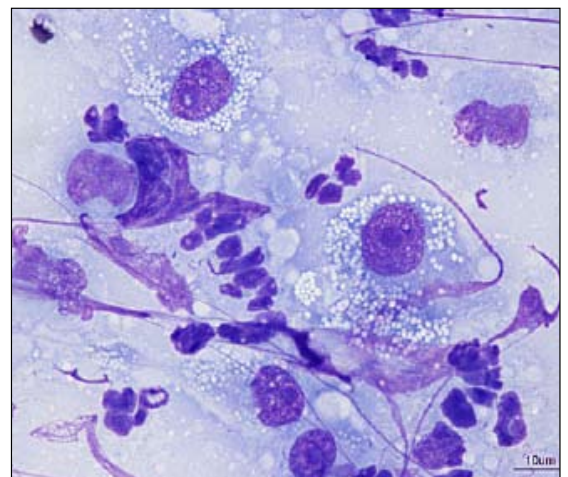


*Gross appearance of coalescing skin lumps.*

chin. The owner had noted a single lump initially but subsequently two additional lumps had appeared. The lumps were growing quite quickly and had started to coalesce together. Katie had remained bright and alert and was eating and drinking as usual. There had been no history of cat fighting and Katie was not known for hunting. On examination Katie was bright and alert,

in good body condition. Her cardinal signs were within normal limits with the only abnormality being the lumps under her chin. These appeared as three coalescing, non-painful, cutaneous masses on the ventral aspect of

the chin (*see above photo*). The submandibular lymph nodes were not enlarged. A fine-needle aspirate was performed and identified a mixed pyogranulomatous reaction. No obvious micro-organisms were visible. (*see photo right*). The initial differential diagnoses considered for this case were feline leprosy, dermatomycosis and cryptococcosis. Due to the absence of visible micro-organisms it was elected to perform

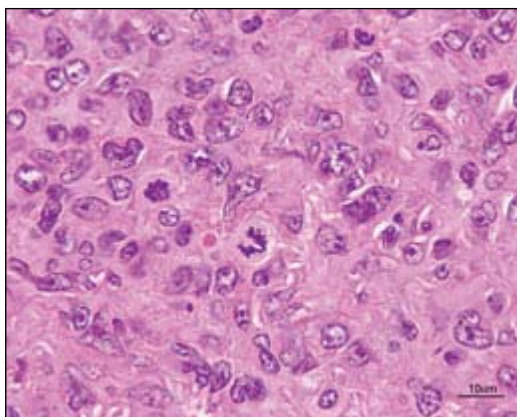


*Cytological appearance of fine-needle aspirate.*

### What's New?

Todd Halsey is now officially certified for PennHip® X-rays. The cost of this procedure is \$500.00 (this includes general anaesthesia, radiography and the cost of film reading in the US.)

incisional biopsy for histopathology and microbiology. The results were as follows "Extending from the superficial dermis to the deep margins of the specimens there is a dense cellular infiltrate which effaces adnexa and infiltrates between skeletal muscle bundles. The infiltrate is mixed, composed predominantly of a histocytic population, admixed with lesser numbers of neutrophils, lymphocytes and plasma cells, and scattered mast cells and eosinophils. There is rare formation of discrete pyogranulomatous, and multiple regions of necrosis. The histocytic population is polygonal to spindle, with mildly pleomorphic nuclei, and mitotic activity is present. No infectious agents are identified. Special stains (Gram, Acid Fast and PAS) are negative for infectious agents". This pathology was consistent with an uncommon type of histocytic tumour called "progressive dendritic



*Histopathology of biopsy showing histiocytes and occasional neutrophil, eosinophil and lymphocyte.*

cell histiocytosis". The tumour cells are most likely of dendritic antigen presenting cell lineage. The tumour may present as solitary nodules but usually as multiple non-painful intra-dermal nodules with a predilection for head, neck, or lower extremities. Lesions may have intact skin or be ulcerated. Treatment with corticosteroids may sometimes be of benefit but is usually unrewarding, as has other forms of chemotherapy.

If the lesions are single then surgical resection is advised but this does not prevent new lesions developing at other sites. The owner of Katie declined surgery and elected for observation only. Six-months later Katie represented with poor appetite, marked weight loss and progression of the chin lesion. The mass was very large with ulcerating skin and secondary infection. Euthanasia was elected.

## Internet Resource Tools

Check out some of the following free websites that can provide excellent veterinary information and make it easier to keep up with what's happening.

### [www.iris-kidney.com](http://www.iris-kidney.com)

Welcome to the website of the International Renal Interest Society (IRIS).

We hope you enjoy this site, which is designed to bring you news and information regarding the work of the IRIS group. The mission of IRIS is to help veterinary practitioners better diagnose, understand and treat kidney disease in cats and dogs.

### [www.ivis.org](http://www.ivis.org)

#### Mission Statement

International Veterinary Information Service (IVIS) is a not-for-profit organization established to provide information to veterinarians, veterinary students and animal health professionals worldwide using Internet technology. The IVIS website provides free access to original, up-to-date publications organized in electronic books each edited by highly qualified editors, proceedings of veterinary meetings, short courses, continuing education (lecture notes, manuals, autotutorials and interactive websites), an international calendar of veterinary events and much more with the help of private and corporate sponsors.

### [www.vetsci.usyd.edu.au/lida/index.php?Pg=2](http://www.vetsci.usyd.edu.au/lida/index.php?Pg=2)

#### Listing of Inherited Disorders in Animals



The University of Sydney

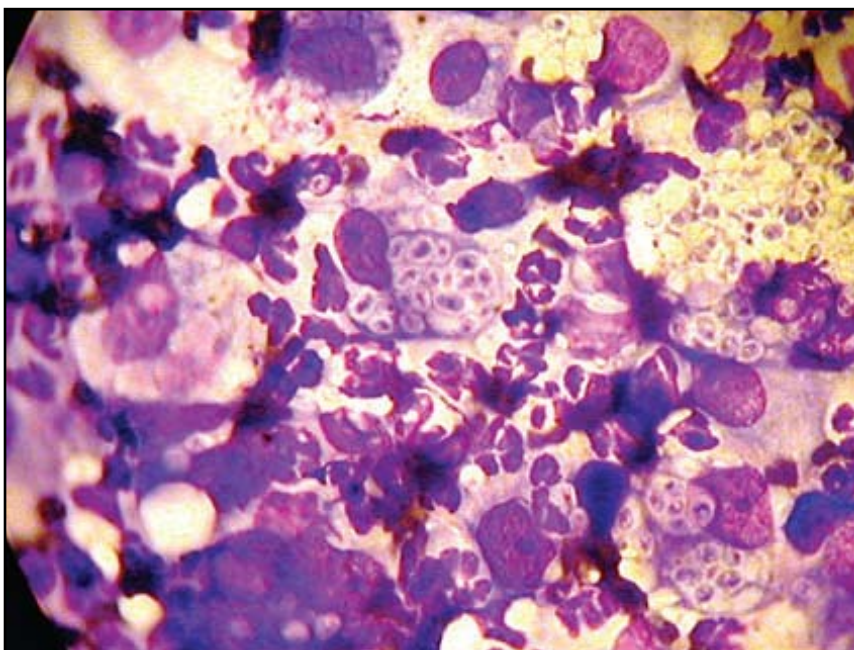
An excellent website that allows you to search by condition or breed for inherited disorders.

## What's Your Diagnosis?

A 7.5-year-old cat presented to the vet with a three week history of progressive nasal swelling. The cat was reasonably bright, active and eating normally. Over the past few days the cat was heard to sneeze in short bursts.

On physical exam the cat had a normal demeanor. The cardinal signs were within normal limits. There was a 1.0cm dermal mass on the left side of the nasal planum. (*see photo*). It was mildly tender to touch. There was no nasal discharge present.

A fine-needle aspiration biopsy was collected for cytology.



*Here is a representative view of what was seen on the cytology slide.*



### Questions

- Q. 1. List your differential diagnoses based on the history and physical examination.
- Q. 2. Describe the cytological findings (*from what you can see in the photo above*).
- Q. 3. What further diagnostic tests would you perform to make your definitive diagnosis?
- Q. 4. What treatment options could you offer this cat?  
(*Answers on Page 4.*)

## Continuing Education Seminars: Notes Available

Below is a list of available continuing education articles / seminars available for reprints. If any of these interest you please send an e-mail to [todd@halifaxvet.co.nz](mailto:todd@halifaxvet.co.nz) and I will e-mail or post a copy (please state your preference in the e-mail) to you.

**Using Colloids in Critically Ill Patients** (Todd Halsey, MS Word).

**How IV Infusion Pumps Can Improve Your Practice.** (Todd Halsey, MS Word).

**Use of Fentanyl Patches for Pain Relief in Cats and Dogs.** (Todd Halsey, MS Word).

**Getting the Most Out of Your Crystalloid Fluid Therapy.** (Todd Halsey, MS Word).

**Minimising Catheter-related Complications in Small Animal Practice.** (Todd Halsey, MS Word).

**Canine Cardiology** (Chris Welland, MS PowerPoint)

**Diagnostic Cytology** (Todd Halsey, MS PowerPoint)

**Feline Cardiology** (Todd Halsey, MS PowerPoint)

**PennHip and 2007 ACVIM Highlights** (Todd Halsey, MS PowerPoint)

## Halifax Veterinary Centre Referral Services

We've just updated our website. You can now download the latest price list, fax referral forms and brochures for your clients. Check it out!

# What's your diagnosis? — Answers

**Q1.**

- Bacterial abscess
- Feline Leprosy (Mycobacteria)
- Hypersensitivity reaction (Mosquito bite allergy)
- Cryptococcosis
- Neoplasia

**Q2.** There is a mix of degenerate neutrophils (ovals) and histiocytic cells (lines). Amongst the mixed inflammatory cells are large numbers of small spherical yeast-like organisms with a thick non-staining capsule (arrows).

A cytological diagnosis of mixed pyogranulomatous inflammation with suspected Cryptococcosis infection was made.

**Q3.** Several further diagnostic tests could be performed to aid a definitive diagnosis. These include a latex agglutination capsular antigen

test (LAT), microbial culture and histopathology. In New Zealand — given the paucity of other deep fungal disease and the highly specific and sensitive nature of the latex agglutination test — serology is the only test that is likely to be required. It is readily available, has a quick turn around time and is very useful in monitoring response to therapy.

**Q4.** There are a number of treatment options available for the treatment of Cryptococcosis. The duration of treatment and costs involved are the main deterring factors.

**Amphotericin B and Flucytosine.** Amphotericin B (AMB) can be administered alone or in combination with flucytosine. The main drawback of AMB is that it has a high incidence of side effects (nephrotoxicity) and is given via parenteral injection — necessitating in-clinic treatment.

Because the dose of AMB is very small it is also required to dilute aliquots and store the remainder in the freezer. This adds to the complicated nature of its use.

**Ketoconazole.** This drug has been used successfully in cats. The dose is best divided into 2 to 3 smaller portions through the day to help reduce anorexia, nausea, vomiting and diarrhoea. If anorexia persists then the drug must be stopped and re-introduced at a lower alternate day dose. Additional side-effects include raised liver enzymes and icterus. The drug is fungistatic and must be given for long periods 6-10 months. It is recommended to continue until the LAT is negative. The drug is not effective for the CNS form of Cryptococcus.

**Itraconazole.** The most commonly used anti-fungal treatment in NZ for feline cryptococcosis. It is more effective than ketoconazole with fewer side effects — although anorexia and vomiting can still occur. It can also cause raised ALT, which should be monitored regularly throughout treatment. Treatment is long with an average span of eight months. Again, it is recommended to treat until at least two LAT's one month apart of negative.

**Fluconazole.** Probably the treatment of choice in terms of effectiveness and safety profile. The main limiting factor is cost. At the recommended dose it would cost approximately \$6.25 per day without any mark up!. Length of treatment is likely to be similar to itraconazole. Use of the LAT to monitor treatment is best.

