

# REPORTING SERVICE: Internal Medicine

Report number: TELE-XXX Report date: XXXX

Referring Veterinarian: XXXXX

Referring Practice: XXXXX

Email address: XXXX

Owner: XXXX Patient: XXXX

Species: Feline Breed: Russian Blue Sex: Female Entire Age: 2 months

Associated cases: VETCT-XXXX

# **Clinical History:**

31/3/05

insured with petplan. 8wks old kitten

Came home and notioced that the kitten had an elevated respiratory rate and when presneetd it wasbetween 70-80, temo 36.5, mucm poink and refil fine, belly distended, kidneys easily paplated and not painful Kitten is bright but owner report liquided D+++ this afternoon, have added a treat stick to the diet, RC food same as supplied by the bredder om Saturday

The temperature is a little low which is surprising and I think the RR is due to GIT pain.gas admit and place on fluids, no absetc at this stage

Feed every couple of hours and wait and see if gets D++ in clinic

1/4/05

ASJ vet check: gums pink moist, mouth fine, Inn normal, chest ausc increased inspiratory effort, weezing, RR 140, HR 120, no murmur, abdo palp bloated otherwise unremarquable, bright in himsefl and very vocal.

As concerned regarding high RR and weezing, two xrays taken conscious (VD and right lateral), showed diffus mixed pattern (both alveolar pattern dorsally, interstitial pattern ventrally)

Called owner to discuss xray findings (pneumonia, origin?) advised full bloods in house, FeLV/FIV and toxoplasma.

Discussed findings with owner, happy for us to go ahead with bloods in house.



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Started on:

Augmentin 20mg/kg slow iv q8hrs Clindamycin 5.5mg/kg slow iv BID Panacur 20mg/kg SID

FeLV/FIV negative PCV 24% WBC normal (??) Biochemistry normal

The radiographs show patchy areas of alveolar and peribronchial infiltrates throughout the lungs but more evident in the dorsocaudal lung field. on the lateral view, there is the impression of a severely distended right cranial bronchus (going from the carina towards cranioventral direction) and right middle, both tortuous. A bronchopneumonia with severe bronchiectasis is suspected.

Bronchiectasis is thought to be irreversible over distension of the bronchus and may happen secondary to airway obstruction, long standing infectious/inflammatory lung disease or primary due to ciliary dyskinesia. A bronchoscopy or CT thorax would probably be good for an accurate understanding, treatment plan or follow up.

# Add on history:

increased breathing and when she was purring much lowder, appetite good, D yesterday morning, last two were normal, no V, chicken wet and dry, had her for only 5days.

Discussed all results with owner, plan for now is to see response to medication. If no improvement in the next 24-48hrs, will go ahead with CT scan.

Owner will visit this evening and bring insurance details. 2/4/05

10am-Augmnetin 20mg/kg i/v Clindamycin 5.5mg/kg i/v Pancur paste 0.16

The kittens respiratory effort has increased and he is becoming inappetenrt Bloods show overall slightly better aneamia amylase remians elevated moderately Proceed to CT have reported urgently Pre and post contrast CT sent to vet CT

#### Diagnostic interpretation:

As per the CT report, a severe pneumonia is evident on the supplied images. In light of the described clinical signs of a kitten that has otherwise been generally bright with few gastrointestinal signs and no focus of pain and slowly progressive disease over a 48 hour period ARDS and neurogenic oedema are considered to be unlikely differential diagnoses. Haemorrhage is also considered unlikely in the absence of trauma or other bleeding diatheses – particularly given the apparent multiple venepunctures that have occurred. Cardiogenic oedema seems highly unlikely based on the examination and CT although the heart rate of 120bpm reported in the clinical record is surprising given the patient signalment and so ECG and blood pressure measurement (+/-echocardiography) are advised to investigate possible cardiac disease. Given the discordancy between the mild clinical signs and severe radiographic changes, and in light of the possible fibrosis, a chronic disease process is suspected.



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Major differential diagnoses for this patient include bacterial pneumonia, viral pneumonia, toxoplasmosis, lungworm or toxin ingestion. Infiltrative neoplasia is unlikely but not ruled out (assuming FeLV status was negative). Feline infectious peritonitis is another possible differential diagnosis.

The current treatment of antibiotics (including clindamycin) and fenbendazole covers for the majority of the treatable conditions within this differential diagnosis list. If a clinical response is not seen then exchanging the amoxicillin-clavulanate for marbofloxacin may provide superior coverage for gram negative bacteria and mycoplasma. Although viral pneumonia is a possible differential diagnosis in this case, there is limited evidence for use of antiviral agents such as famciclovir and its administration may be problematic and stressful to the patient so it is not advised. Nebulisation and conservative fluid therapy can be considered to loosen secretions but coupage should not be performed in a small, compromised patient such as this.

Ideally, sampling of the infiltrate should be performed in order to better characterize the problem but the decision of whether the patient is stable enough for such procedures is a clinical one. Based on the picture available, significant risk exists with any sedation/anaesthesia. If it is deemed stable, an endotracheal wash should be performed and submitted for cytology, culture and mycoplasma PCR (+/- viral PCRs). A pulmonary aspirate can also be considered to obtain a cytologic sample and possibly also a sample for culture. This could be considered under sedation and ultrasound guidance to find a peripheral affected area. Given the apparent fibrosis, a risk of significant pneumothorax exists with this procedure.

Oxygen therapy should be considered for this patient prior to respiratory failure, particularly in light of the sustained tacyhpnoea and the possibility respiratory fatigue. Bronchodilators such as aminophylline can also be considered to reduce respiratory fatigue if cardiac disease is confidently excluded. Unfortunately, given the small patient size, mechanical ventilation is unlikely to be a viable option I this case.

#### Recommended treatments and further tests:

Consider the following as detailed above:

- Oxygen therapy
- Nebulisation
- Commencing marbofloxacin
- Further cardiac investigations
- Coagulation profile testing
- Bronchodilator therapy
- Sampling via endotracheal wash or lung aspirates

**Additional comments**: Unfortunately, given the severe and apparently chronic nature of the changes in this patient, there is a high likelihood that this condition will be terminal and this should be considered with respect to further diagnostics and treatment.

# **Reporting Specialist:**

XXXXX, BSc (Hons), BVetMed (Hons), DACIM (SAIM), DipECVIM-CA, MRCVS

