

Case Log for the Certificate of Small Animal Veterinary Practice / Laboratory Diagnostics

Case log explanations and instructions:

The case log for the Certificate of Small Animal Veterinary Practice / Laboratory Diagnostics shall contain at least **100 cases** mostly compiled in the second half of the program.

Among the 100 cases, all shall be laboratory medicine related. These should be from both cats and dogs, and each of these species must account for at least 25% of cases. Each of the following categories shall have at least the following number of cases:

Cytology	35
Haematology	35
Endocrinology	15
Biochemistry	15

Please note: if the subjects chosen do not include biochemistry / endocrinology, further cytology and haematology cases can be chosen to reach a total number of 100 cases.

1. **Date:** give date of first presentation for current complaint
2. **Case identifier:** number in computer system or name of dog/cat and owner
3. **Species and Breed:** dog or cat (use drop-down list)
4. **Age and Sex:** in years or months if < 1 year
5. **Major complaint / problems:** give all pertinent abnormal findings from history and physical examination
6. **Examinations:** list all laboratory tests performed and the pertinent abnormal findings
7. **Final diagnosis:** give all reached diagnoses
8. **Treatment / management:** list drugs, surgical procedures, dietary and other management recommendations
9. **Outcome:** give follow-up results including time when performed. Depending on problem/diagnosis, reasonable follow-up is required.
10. **Category:** indicate which subjects the case belongs too.

The case log needs to be compiled as an Excel file using the template in the appendix.

Abbreviations may be used but must be explained on an extra sheet

List the cases in chronological order.

Example Case Log Lab Diagnostics

Major complaint/ problems	Examinations (Laboratory results, diagnostic imaging, etc.)	Diagnosis	Treatment and outcome	Category
Vocalization, lethargy, anorexia, fever, severe neck pain	CBC: mild leukocytosis Biochemistry: raised globulin RX neck region: no abnormalities CSF: moderate pleocytosis (80cc/ul) mostly containing non-degenerated neutrophils (90%), no bacteria, high IgA and total protein. Culture of CSF: negative after 48 hours	Neutrophilic pleocytosis, suggestive of steroid-responsive meningitis	Treatment with prednisolone (2mg/kg BID 2 days and reducing dosage). Control of CSF after 8 weeks: normal. Prednisolone was given for 4 months in total. Control CSF at end of treatment: normal	Cytology
Rapid onset unilateral facial swelling since few days Previous small (1x1 cm) cutaneous lesion on the lip for at least 6 months, not disappeared with antibiotic and NSAID treatment	FNA lip mass: prevalence of granulated mast cells with signs of atypia (poor granulation, anisocytosis/anisokaryosis, binucleation), concurrent increase in eosinophils and rare fibroblasts. FNA LN: mixed population of lymphoid cells and increased numbers of mast cells (~20 mast cells per hpf) showing signs of atypia and forming groups of up to 10 cells. Abdominal ultrasound: no signs of visceral involvement CBC and biochemistry: minimal changes	Metastatic mast cell tumour	Oral prednisone (2mg/kg os die) and misoprostol in preparation for radiotherapy. The dog received fractions of 9Gray (Gy) to the muzzle and neck over 4 consecutive weeks to a total dose of 36 Gy. A partial (almost complete) remission was obtained and maintained for 5 months. The dog died from sudden onset of respiratory distress 177 days (5,9 months) after starting specific treatment and 357 days (11,9 months) after the appearance of the lip lesion.	Cytology
Since 6 months recurrent UTI symptoms: haematuria, pollakiuria. Was treated with antibiotic therapy (2 times amoxicillin clavulanic acid 1 week, 1 time trimetoprim sulfamethoxazole 10 days). Now again pollakiuria and haematuria.	US abdomen: evidence of mass in bladder trigone and enlarged regional lymph nodes. Traumatic catheterization of the bladder mass and cytology examination. No signs of inflammation, presence of a main population of transitional epithelial cells arranged in clusters and showing marked cytological features of atypia (anisocytosis, anisokaryosis, mitotic figures, prominent nucleoli). Cells contain Melamed Wolinska bodies.	Transitional cell carcinoma (TCC)	Owner refused full staging and decided for palliative treatment (meloxicam 0,1 mg/kg SID and tramadol 1 mg/kg TID). Euthanasia 3 week later due to worsening of clinical conditions.	Cytology
Progressive all four-limb ataxia, staggering, behavioural change for 2 weeks with acute deterioration in the last 2 days. Solid mammary carcinoma surgically removed one year before, which recurred 6 months later and was also removed.	Physical examination: NAD, mild tachypnoea, slightly hyperaemic mucous membranes. Neurological examination: The dog was obtunded, non-ambulatory tetraparetic with decreased postural reactions and increased spinal cord segmental reflexes in all four limbs. It also had obvious cervical hyperesthesia Thoracic X rays, abdominal ultrasound: minimal changes. MRI: T1-weighted image after contrast administration, focal contrast enhancing lesion in the left temporal lobe CSF: mild pleocytosis with prevalence of atypical large mononuclear cells (>80%) with marked signs of atypia. Immunocytochemistry: cytokeratin (+), CD18 (-), CD3 (-), CD79a (-) supportive of epithelial origin	Metastatic carcinoma, likely mammary in origin	Neurological signs worsened in the following days and the owners elected for euthanasia. Post-mortem examination was not performed.	Cytology
One week of lethargy, anorexia, sporadic episodes of vomiting and pale mucous membranes.	Haematology: evidence of severe anaemia (HCT: 20%) with regeneration (reticulocytes: 220 x 10 ⁹ /L). On blood smear examination evidence of marked polychromasia, and moderate numbers of spherocytes (>10 spherocytes per hpf 50x). Mild inflammatory leukogram (WBC: 20 x10 ⁹ /L, neutrophils 16x10 ⁹ /l) and spurious thrombocytopenia (due to clumping). Saline agglutination test and Coombs test positive. Biochemistry: mild hyperbilirubinaemia (3 mg/dL). Negative SNAP 4Dx Plus Test for vector borne disease.	IMHA	Dog received dexamethasone 0.3mg/kg IV once daily until stable, then changed to oral prednisolone 1mg/kg twice daily by mouth. At follow up visits, the HCT increased gradually and went back to normal in 4 weeks.	Haematology

Example Case Log Lab Diagnostics

<p>A few days of lethargy, anorexia and weight loss.</p>	<p>Haematology: evidence of moderate leucocytosis ($45 \times 10^9/L$) mostly characterised by atypical mononuclear cells likely lymphoid in origin with large nuclei (3x rbc). Moderate poorly regenerative anaemia (HCT: 23%) and thrombocytopenia ($85 \times 10^9/L$, no clumping). Suggestive of Acute Lymphoid leukaemia (ALL) and myelophthisis. Diagnostic imaging: no other enlarged organs or masses noticed. Flow cytometry: atypical cells were positive to CD45, CD3, CD5 and negative to CD20, CD79a supporting a T cell origin.</p>	<p>T-ALL</p>	<p>Dog conditioned deteriorated very quickly and WBC count increased to 64×10^9 after 72h. Dog was put to sleep as owners refused chemotherapy.</p>	<p>Haematology</p>
<p>Melena, vomiting, lethargy, anorexia, dehydration. Unvaccinated dog.</p>	<p>Haematology: leukopenia ($2.5 \times 10^9/l$) with neutropenia, left shift and toxic changes. Biochemistry: low glucose: (1,1 mmol/l) In house parvovirus antigen test on fresh faeces: positive</p>	<p>Parvovirus infection</p>	<p>Glucose 50% boli until normal blood glucose level Fluid therapy Amoxiclav 12,5 mg BID IV Maropitant 1 mg/kg SID SC Metoclopramide 1 mg/kg IV over 24 hours Ranitidine 2 mg/kg IV TID Diet: Royal Canin convalescence support through nasopharyngeal tube Dog recovered completely after a few days</p>	<p>Biochemistry</p>
<p>Anorexia, lethargy, oliguria, painful abdominal palpation</p>	<p>Haematology: mild anaemia Biochemistry: moderate azotaemia (creatinine: 2.3 mg/dL), moderately raised liver enzymes (ALT, AST, ALP, GGT), total bilirubin and fasting bile acids. UA: SG 1.020, wbc and rbc in sediment, proteinuria, glucosuria, culture negative US: enlarged liver, hyperechoic cortex of both kidneys. PCR for Leptospira un urine and blood: positive</p>	<p>Leptospirosis</p>	<p>Fluid therapy Follow-up of urine production Amoxiclav 8,5 mg/kg IV BID Ranitidine 1 mg/kg TID Clinically better after 3 days: normal appetite, normal urine production. Antibiotic therapy was switched to doxycyclin when leptospirosis was confirmed and continued for other 3 weeks.</p>	<p>Biochemistry</p>
<p>Coughing, stiff gait, anorexia, fever</p>	<p>Haematology: leukopenia ($3.1 \times 10^9/L$) with neutropenia, toxic changes and left shift Biochemistry: mild elevation ALP (189 UI/L) urinalysis: normal RX thorax: mild interstitial pattern caudally US abdomen: normal US heart: mild insufficiency of mitral and tricuspidal valve Blood culture (Bactec): positive</p>	<p>Septicemia, underlying cause could not be identified, endocarditis not excluded</p>	<p>Amoxiclav 20 mg/kg TID IV Enrofloxacin 5 mg/kg BID IV Fever and other complaints disappeared after 1 resp. 2 days, oral therapy was continued for 3 weeks. At control visit after 3 weeks the valve insufficiency is still present. cTNI was negative. Endocarditis less probable because there is no change in the cardiac parameters compared to the previous US.</p>	<p>Biochemistry</p>
<p>Weight gain despite restricted calories diet, lethargy, weak pulse, bradycardia</p>	<p>Haematology: mild non regenerative anaemia (HCT: 31%) Biochemistry: mild hypercholesteremia, mild elevation of ALT Endocrinology: low total T4 <13 nmol/L) TSH: above normal values (1ng/ml)</p>	<p>Hypothyroidism</p>	<p>Levothyroxine 10 µg/kg po BID. Control after 6 weeks: dog is clinically better, no more lethargy. T4 has not increased. Planned monitoring every 6 months.</p>	<p>Endocrinology</p>
<p>PU/PD, polyphagia, abdominal distension, enlarged liver</p>	<p>Haematology: mild leucocytosis (neutrophilia without left shift, lymphopenia) Biochemistry: raised ALP (450 IU/L). Urinalysis: USG 1.010, no other abnormalities LDDST: suppression after 4h but high cortisol after 8h. No ultrasound and CT of the head were performed due to financial restrictions</p>	<p>Cushing's disease, probably pituitary dependant</p>	<p>Owner chooses medical treatment: trilostane 3 mg/kg SID (tablet of 30 mg Vetoryl®). ACTH-stimulation test was performed after 14 days, 1 month and 3 months. Improvement of the PU/PD and polyphagia, ACTH-stimulation tests showed a correct dosage of trilostane</p>	<p>Endocrinology</p>
<p>PU/PD, BCS 9/9</p>	<p>Haematology: unremarkable Biochemistry: moderate hyperglycaemia (23 mmol/l), no other abnormalities Urinalysis: glucosuria, no ketonuria, culture negative Fructosamine: raised values (500 umol/L)</p>	<p>Diabetes mellitus</p>	<p>Caninsulin was started at 10 IU BID (0.25 IU/kg), control of blood glucose weekly 6h after injection, adjusting dosage in steps of 15% until normoglycemic Diet: Trovet WRD</p>	<p>Endocrinology</p>

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