

**Guide
to the small animal practice, internal medicine 11th term**

Topics of dogs and cats

1. Differential diagnosis of diarrhoea and vomitus, therapy of gastrointestinal diseases (Dr. Kinga Pápa)

- Differential diagnosis of diarrhoea of intestinal and extraintestinal origin
- Classification of small and large intestinal diarrhoea
- Classification of acute and chronic diarrhoea
- Differential diagnosis of disorders with acute and chronic vomitus
- Physical examination with special regard to the gastrointestinal system
- Planning the diagnostic protocol for a certain patient
- Sampling for laboratory examination, evaluation of the results in gastrointestinal diseases
- Participation in abdominal X-ray examinations, evaluation of abdominal X-rays
- Participation in abdominal ultrasound examinations
- Planning a therapeutic protocol according to the clinical findings of a given patient
- Differential diagnosis of vomitus and regurgitation

2. Fluid, electrolyte and acid-base therapy (Dr. Ágnes Sterczer)

- Knowledge of different crystalloid and colloidal infusions
- Calculation of the quantity of maintenance and rehydrating infusions and speed of administration in different diseases
- Calculation of K⁺-supplementation according to laboratory results (volume and speed of infusion)
- Planning the infusion therapy needed in acid-base disturbances, evaluation of special acid-base results
- Use of infusion pumps
- Patient monitoring during infusion therapy

3. Differential diagnosis of anaemias and coagulopathies, blood transfusion (Dr. Péter Vajdovich)

- Knowledge of different blood preparations
- Steps of drawing blood and performing blood transfusion
- Characteristics, types, diagnosis and therapy of non-regenerative anaemias
- Characteristics, types, diagnosis and therapy of haemolytic anaemias
- Characteristics, types, diagnosis and therapy of platelet disorders
- Characteristics, types, diagnosis and therapy of coagulopathies
- Self-made haematocrit measurement, examination of bleeding and blood clotting time
- Self-made evaluation of blood smears

4. Differential diagnosis of jaundice, therapy of liver patients (Dr. Ágnes Sterczer)

- Physical examination, planning a diagnostic protocol for a certain patient
- Sampling, evaluation of laboratory findings in patients with jaundice
- Self-made haematocrit measurement
- Participation in abdominal ultrasound examination
 - Self-made detection of gallbladder, spleen, kidney, intestines, evaluation of ultrasound findings
- Cholecystocentesis and/or fine needle aspiration from the liver (participation)
- Occasional participation in liver biopsy, evaluation of the findings
- Planning a therapeutic protocol based on the results of the diagnostic work-up

5. Differential diagnosis of polyuria and polydipsia (PU/PD), therapy of kidney patients (Dr. Ferenc Manczur)

- Definition of PU and PD in dogs and cats
- Pathomechanism of PU/PD
- Diseases causing PU/PD
- Diagnostic steps in patients with PU/PD
- Catheterization of the urinary bladder in dogs, self-made cystocentesis
- Individual examination and evaluation of urine samples
- Therapy of acute renal failure in general and as a complication of:
 - ethylene-glycol toxicosis
 - babesiosis, immunohaemolytic anaemia (IHA)
 - leptospirosis
- Therapy of chronic renal failure
 - therapy of patients with proteinuria

6. Endocrine diseases, therapy of endocrine patients (Dr. Ákos Máthé)

- Physical examination, planning a diagnostic protocol for certain patients with endocrine diseases
- Determination of routine laboratory parameters in endocrine diseases; evaluation of the results
- Special diagnostic methods for the more frequent hormonal diseases in dogs and cats, evaluation of the results
- Differential diagnosis of polyuria and polydipsia
- Characteristics of skin symptoms of endocrine origin and their differential diagnosis
- Therapy of hyperthyroid cats
- Therapy of hypothyroid dogs
- Therapy of diabetic dogs and cats
- Therapy of Addison patients
- Therapy of Cushing syndrome in dogs
- Aetiology and therapy of hypoglycaemia and hypocalcaemia

7. Shock and resuscitation (Dr. Zoltán Dudás Györki)

- Recognition of the status of shock, differentiation of the various “types” of shock
- Tasks in case of shock, participation in the management of shock patient(s)
- Medication of shock (drugs, infusions)
- Order of resuscitation, possible participation in (contribution to) resuscitation
- Instruments of resuscitations
- Practicing of intubations and artificial breathing (oxygen therapy)
- Indications of euthanasia, its methods and drugs. Participation in the euthanasia of dog(s) and cat(s). Practicing injection of intracardiac drugs.

8. Differential diagnosis of diseases causing dyspnoea, management of respiratory patients

(Dr. Roland Psáder)

- Physical examination of the respiratory organs
- Differential diagnosis of diseases of the upper and lower respiratory tract
- Participation in performing thoracic radiography
- Self-made analysis of radiographs
- Possibilities of sampling from the respiratory tract, demonstration
- Participation in respiratory endoscopy
- Performing endotracheal tubing
- Learning and performing oxygen therapy
- Planning of treatment strategies of coughing patients
- Performing clinical examination, planning diagnostic and therapeutic protocol(s) of a respiratory patient

9. Management of cardiological patients (Dr. Csaba Hetey and Dr. Károly Vörös)

- Physical examination of the cardiovascular system
- Aspects and possibilities of the differential diagnosis of cardiac diseases
- Participation in performing thoracic radiography, evaluation of thoracic radiographs
- Performing ECG-s, evaluation of ECG recordings, learning (knowledge) of the most common cardiac arrhythmias and ECG characteristics of cardiac chamber enlargements
- Participation in echocardiographic examinations, learning the basics of two-dimensional and M-mode echocardiography on practice level
- Performing indirect blood pressure measurement (or at least participation in applying the technique)
- Stages of cardiac insufficiency, diagnostic features
- Knowledge (learning) of therapeutic aspects and drugs of acute cardiac insufficiency

10. Differential diagnosis and management of patients with convulsions (Dr. Ágnes Sterczer and Dr. Ákos Máthé)

- Physical examination, planning of the diagnostic protocol of a real patient
- Determination (indication) of the necessary laboratory examinations, evaluation of the laboratory findings
- Differential diagnosis of intra-and extracerebral disorders causing convulsions

- diagnostic protocols for these (each) disorders
- therapeutic protocols for these (each) disorders

- Assisting at sampling of cerebrospinal fluid (if indicated at the given patient)
- Performing or participating in additional diagnostic examinations (ECG, ultrasound, radiography)
- Treatment of status epilepticus
- Treatment and follow-up monitoring of epileptic patients

11. Management of oncologic patients (Dr. Péter Vajdovich)

- Types and diagnosis of canine lymphomas
- Types and diagnosis of feline haemopoietic neoplasms
- Requirements and side effects of chemotherapy
- Characteristics, types and diagnosis of splenic neoplasms
- Types and diagnosis of canine leukemias
- Paraneoplastic syndromes in canine lymphoma
- Performing or participating in cytological sampling
- Self-made evaluation of cytological smears

12. Differential diagnosis of pruritus and alopecia, management of dermatological patients

(Dr. Noémi Tarpataki)

- Classification (aetiology) of dermatological disease (in order of the intensity of pruritus and disease prevalence)
- Diagnostic and treatment of ectoparasitoses
- Differential diagnosis (steps) of allergodermatitis
- Long-term treatment of atopic dermatitis
- Additional diagnostic methods in dermatology, their indications, sensitivities, specificities, their place (role) in making the diagnosis. Demonstration of the various diagnostic methods
- Similar (identical) and different hair and skin symptoms of the diseases causing pruritus and/or alopecia
- Steps of the differential diagnosis of primary alopecia (infectious and non-infectious causes!)
- Treatment of generalized pustular demodicosis
- Treatment of pyodermas
- Possible diagnoses made during the clinical examination, examination methods for supporting and/or excluding these differential diagnoses in the case of a real patient

13. Differential diagnosis and management of FeLV, FIP, and FIV infections

- Clinical signs, different clinical forms of the diseases
 - Diagnostic tools and their limitations in these disorders

- Participation in thoracic and abdominal X-ray and ultrasound examinations, interpretation of the results
- Theory and practice of blood transfusion medicine in feline patients – participation in the procedure
- Participation in diagnostic thoraco- and abdominocentesis with own practice if possible; interpretation of the results
- Treatment possibilities of feline viral diseases – emergency care and long term management
- Aspects of prophylaxis, screening and selection systems of these diseases in multiple cat households and catteries

Avian and Exotic Animal Diseases

1. The reptile patient: clinical examination and most important diseases

- Taking a full history with special emphasis on husbandry and nutritional conditions
- Restraint techniques and physical examination in reptiles
- Principals of choosing the right imaging and laboratory examinations in a reptile patient
- Interpretation of the reptile radiogram
- The diagnostic value of haematology and clinical chemistry in reptiles
- Etiology, pathogenesis, clinical signs and treatment of MBD (Metabolic Bone Disease)
- Principals of reptile surgery, most important surgical indications in reptile patients

2. The avian patient: clinical examination and most important diseases

- Taking a full history with special emphasis on husbandry and nutritional conditions
- Restraint techniques and physical examination in birds
- Principals of choosing the right imaging and laboratory examinations in birds
- Interpretation of the avian radiogram
- The diagnostic value of haematology and clinical chemistry in birds
- Anatomy and most important diseases of the avian respiratory tract. Principals of the therapy and management of dyspnoic avian patients
- Most important diseases of the avian urogenital tract, principals of the therapy
- Principals of avian surgery, most important surgical indications in avian patients

3. The small mammal patient: clinical examination and most important diseases

- Taking a full history with special emphasis on husbandry and nutritional conditions
- Restraint techniques and physical examination in small mammals
- Principals of choosing the right imaging and laboratory examinations in small mammals
- Interpretation of the radiogram in small mammal species
- The diagnostic value of haematology and clinical chemistry in small mammals
- The most important endocrine diseases of ferrets: clinical signs, diagnosis, principals of the therapy
- Gastrointestinal disorders in rodents, principals of the therapy
- Principals of surgery and most important surgical indications in small mammal