



Clinical pharmacology

ECTS: 2.00

SUBJECT MATTER CONTENT

LECTURE

Chemotherapy of neoplastic diseases. New immunosuppressive drugs used in the treatment of allergic and autoimmune diseases in dogs and cats. The pharmacotherapy/control of pain – practical issues. Gastrointestinal pharmacology. Anticonvulsant therapy in dogs and cats. Selected neurologic therapies in dogs and cats.

CLASSES

Auditorium classes: Guidelines for the clinical use of antibiotics in the treatment of selected infections in dogs and cats (for example superficial and deep pyoderma, subcutaneous abscess, periodontitis, gingivitis, pneumonia, canine infectious tracheobronchitis, pyothorax, lower urinary tract infection, pyelonephritis, prostatitis). Current recommendations for the pharmacological management of canine and feline behavioral diseases (for example current recommendations for the pharmacological management of separation anxiety, compulsive disorders and dominance aggression in dogs). Chemotherapy of neoplastic diseases – practical issues. Steroidal anti-inflammatory drugs – practical aspects. Drugs affecting the respiratory system (with a particular focus on allergic airway inflammation in dogs, cats and horses) – practical aspects. Practical classes: Antibiotic selection for the treatment of most important nonspecific bacterial systemic infection in dogs and cats. Drug selection for the treatment of heart failure and hypertension in dogs and cats. Treatment/drug selection for the treatment of most important ocular diseases in small animals [bacterial blepharitis, conjunctivitis (bacterial, viral and chlamydial), ulcerative keratitis, keratoconjunctivitis sicca, chronic immune-mediated superficial keratoconjunctivitis, uveitis, bacterial endophthalmitis, acute primary angle-closure glaucoma attack, uveitis-induced glaucoma]. Selection of appropriate analgesic agent or combination such drugs (including coanalgesics) for the treatment of pain depending on its type, intensity, duration and cause.

TEACHING OBJECTIVE

The aim of this course is the acquisition of knowledge and skills by students with respect to the current guidelines/recommendations for the treatment of most important diseases in common veterinary species with a particular focus on dogs and cats.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the discipline:

R/WA_P7S+++

Symbols for outcomes related to the field of study:

A.W17. +, A.U11. +, K.1.+ , A.U21. +, B.W3. +, K.4.+ , B.U11. +, B.U13. +, A.W16. +, B.U10. +, K.8.+

Legal acts specifying learning outcomes:
682/2020
Disciplines: Veterinary science
Status of the course: Fakultatywny
Group of courses: B - przedmioty kierunkowe
Code: ISCED 0841
Field of study: Veterinary Medicine
Scope of education:
Profile of education: General academic
Form of studies: full-time
Level of studies: uniform master's studies
Year/semester: 4/7

Types of classes: Lecture, Classes
Number of hours in semester: Lecture: 10.00, Classes: 20.00
Language of instruction: Polish
Introductory subject: Pharmacology, pharmacy, clinical and laboratory diagnostics.
Prerequisites: Appropriate level of knowledge in the above mentioned subjects.

Name of the organisational unit conducting the course: Katedra Farmakologii i Toksykologii
Person responsible for the realization of the course: prof. dr hab. wet. Tomasz Maślanka
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Additional remarks:

LEARNING OUTCOMES:

Knowledge:

W1 – Student: (a) knows the current guidelines and recommendations for the pharmacological management of diseases and disorders, which were discussed during lectures and classes; students understands the theoretical and practical factors underlying these guidelines and recommendations; b) knows the principles of treatment of pain taking into account the “analgesic ladder” and “reverse pyramid” approach; (c) knows new approved immunosuppressive drugs, including biological ones, recommended for the treatment of allergic and autoimmune diseases in dogs and cats; (d) knows a general principles of chemotherapy the treatment of the most common neoplastic diseases in dogs; (e) knows rules for the selection and dosage of steroidal anti-inflammatory drugs for most important diseases and disorders in which these drugs are the mainstream treatment.

Skills:

U1 – Student: (a) is able to make rational choice of therapy in respect to diseases, which were discussed during lectures and classes, i.e. the proposed pharmacotherapy is efficient, safe (benefit-risk ratio) and cost-effective, and moreover it is in agreement with the current guidelines and recommendations for the treatment of these diseases; (b) is able to propose the alternative treatment of diseases – which were discussed during lectures and classes – if typical recommended treatment (i.e. the first line treatment) cannot be delivered (due to the existence of contraindications etc.); (c) is able to select an appropriate combination of analgetic agents for the treatment of pain depending on its type, intensity and cause; (d) is able to select an appropriate type and dosage of steroidal anti-inflammatory drugs for most important diseases and disorders in which these drugs are the mainstream treatment; (e) is able to select bronchodilators and drugs controlling of airway inflammation in aspect of allergic airway inflammation in dogs, cats and horses; (g) is able to select antiemetics depending on the pathophysiology of vomiting; (g) is able to select motility modulating drugs depending on the pathophysiology and intensity of gastrointestinal motility disorders.

Social competence:

K1 – Student: a) shows initiative and updates the knowledge in the clinical pharmacology field; b) is aware of the benefits and risks associated with drugs use; c) is aware of personal limitations.

TEACHING FORMS AND METHODS:

Lecture(W1;U1;):Informative lectures with multimedia presentations

Classes(W1;U1;K1;):Informative classes with multimedia presentations; discussion; teamwork, completing tests and tasks, among other with respect to antibiotic selection based on: (a)the current guidelines; (b) results of microbial sensitivity tests and description of a case; interactive classes with the using so-called "puzzles" with respect to selection/drug combination for: (a) the management and treatment of various types of pain; (c) the treatment of most important cardiovascular and ocular diseases.

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Colloquium test) - Two colloquiums will take place during the course as a written multiple choice test as it is described below. -

Classes (Colloquium test) - Two colloquiums will take place during the course as a written multiple choice test. To pass the colloquium student is obliged to obtain at least 65% points. The grading scale is based on following point levels: 94-100%, degree: excellent (5,0); 87-93%, degree: very good (4,5); 80-86%, degree: good (4,0); 73-79%, degree: satisfactory (3,5); 66-72%, degree: sufficient (3,0); 65%, degree: unsatisfactory=fail (2,0). Student who fails the colloquium can retake it twice. Final grade for the subject is determined by averaging the grades (including failing grades) obtained on both colloquiums. Rules for rounding grades: the average $\geq 4,76$: excellent (5,0); the average 4,26 – 4,75: very good (4,5); the average: 3,76 – 4,25: good (4,0); the average 3,26 – 3,75: satisfactory (3,5); the average $\leq 3,25$: sufficient (3,0). Failure of any colloquiums constitutes failure of the course. The verification of the achievement of learning outcomes with respect to the lecture topics is carried out as part of both colloquiums. -

BASIC LITERATURE:

1. Maddison J.E., Page S.W., Church D.B. (red.), *Small Animal Clinical Pharmacology*, Wyd. Elsevier Saunders, R. 2008
2. Maślanka T., *Farmakologia kliniczna małych zwierząt – wybrane zagadnienia*, Wyd. Druk-24h.com.pl, Białystok, R. 2014
3. D. M. Boothe (red.), *Small Animal Clinical Pharmacology and Therapeutics*, Wyd. Elsevier Saunders, R. 2012

SUPPLEMENTARY LITERATURE:

1. Hsu W.H., *Handbook of Veterinary Pharmacology*, Wyd. Wiley-Blackwell, R. 2008

