

ANTIBACTERIAL THERAPY STRATEGIES IN VETERINARY MEDICINE

Study Programm: MIMV Curricular Year: 4th Semester: 8th Optional Credits: 4.5 ECTS

Lecturer(s): José H. Duarte Correia (CCP); Maria Constança M. F. Pomba (R Miguel Saraiva Lima, M^a Manuela R. E. Niza); Luísa Mateus; George Stilwell; Ana Mafalda Lourenço; Ricardo Bexiga, Lisa Mestrinho.

1. Contact hours: Lectures – 20; Practicals – 8; Total – 28

2. Objectives of the discipline:

To recognize the need to institute antibacterial therapy. Perspectivate the sequential steps leading to a rational therapeutic plan: i) Suspect infection based on clinical history and physical examination; ii) Identify the site of infection; iii) Evaluate the need of sample collection for bacteriological culture and sensitivity testing; iv) Decision-making on empirical antibacterial therapy; v) Decision-making on readjustment of therapy, if needed, based in the results of sensitivity testing.

Maximize therapy so as to minimize the emergence of antibacterial resistance. Apply the “Case-Based Learning (CBL)” method to the study of companion animal clinical cases involving the genito-urinary tract, skin infection, respiratory infection and production animals respiratory and mammary gland infection.

3. Programme:

Theoretical Programme: General framework of antibacterial therapy [Maximization of clinical efficacy: dosage, synergistical association of antibacterials, compliance; antibacterial resistance in Portugal: Rational, evidence-based antibacterial therapy; antibiotics labelled for human use in Veterinary Medicine]. Treatment of gastrointestinal bacterial infection. Treatment of genito-urinary infection, skin infection and respiratory infection of companion animals and respiratory and mammary infection in production animals.

Practical Programme: Learning of medical deductive reasoning is established in each problem-case through the specific objectives listed above, which are common to all practical didactic units. The “Case-Based Learning (CBL)” method is applied to the study of companion animal clinical cases involving the genito-urinary tract, skin infection, respiratory infection and production animals respiratory and mammary gland infection.

4. Bibliography

- Bothe, D. M. (2001). *Small Animal Clinical Pharmacology and Therapeutics*, 1^a edição, W.B. Saunders Company.
- Constable, P.D. & Morin D.E. (2003). Treatment of clinical mastitis. Using antimicrobial susceptibility profiles for treatment decisions. *Veterinary Clinics of North America: Food Animal Practice*, 19, 139-155.
- Ettinger, S. J. & Feldman, E. C. (2005). *Textbook of Veterinary Internal Medicine: Diseases of the Dog and Cat*, 6^a edição, W.B. Saunders Company.
- Guardabassi, L., Jensen, L. B. e Kruse, H. (2008). *Guide to Antimicrobial use in animals*, Blackwell Publishing.
- Nelson, R. W. & Couto, C. G. (2003). *Small Animal Internal Medicine*, 3^a edição, Mosby. Inc..
- Prescott, J. F., Baggot, J. D. & Walker, R. D. (2000). *Antimicrobial Therapy in Veterinary Medicine*, Iowa State University Press.

5. Assessment:

The evaluation of theoretical and practical knowledge is done by means of a written test in the last day of the course. Marking of the test is done in a scale of 0 to 20. Continuous evaluation, through assessment of the interest and active participation of the student in class, as well as attendance level, from 0 to 20 marks. The final mark will reflect the relative weight of the written test (80%) and the continuous evaluation (20%).