Instructional Objectives / Learning Outcomes
DMP 775, Veterinary Clinical Pathology
Department of Diagnostic Medicine/Pathobiology
College of Veterinary Medicine, Kansas State University

Material not in *Fundamentals of Veterinary Clinical Pathology, 2002*

Pleural and peritoneal fluid analysis

325. If given the results of a pleural or peritoneal fluid analysis and other pertinent clinical information, use appropriate terms to classify the effusion as a pure transudate, exudate, septic exudate, non-septic exudate, heart failure effusion, hemorrhagic effusion, chylous effusion, or neoplastic effusion.
326. Describe each component of a routine pleural or peritoneal fluid analysis (including units of measurement) and the purposes or potential value of each analytical procedure.
327. Based on your understanding of inflammatory reactions, explain the difference between peritoneal or pleural effusions that contains many neutrophils versus ones that contains many macrophages.
328. Explain and recognize an advantage and a disadvantage of collecting pleural or peritoneal fluid into an EDTA-containing tube.
329. Explain the pathogeneses (how or why) of each of the following and propose and recognize disorders (diseases, pathologic states) which might cause them: pure transudate, exudate, septic exudate, non-septic exudate, heart failure effusion, hemorrhagic effusion, chylous effusion, or neoplastic effusion.
330. Explain why pleural or peritoneal fluid should be submitted to attempt to culture microorganisms if:
    a. Organisms are seen in a microscopic examination
    b. Organisms are not seen in a microscopic examination
331. Compare and contrast the morphologic features of degenerate and nondegenerate neutrophils and their diagnostic significance.
332. Explain why the microscopic evaluation of pleural and peritoneal fluid is an important component of the analysis of effusions; give examples to justify your answer.