INTRODUCTION

The presence of a little amount of liquid in the body cavities is physiological and it keeps, in normal situation, in a constant balance between production and reabsorption.

This study is a literature review where we have joined the different analysis methods applied in the evaluation of these fluids and the special features in the interpretation of the results, on each species.

LABORATORY PROCESS

Basic analysis that all samples should be made (Figure 1):
- Gross evaluation (macroscopic)
- Total nucleated cell count (TNCC)
- Cytologic study
- Biochemical analysis

Gross evaluation:
It is necessary to record the total volume collected and its characteristics like de color, turbidity or clearness and odor (DeHeer et al., 2002).

Viscosity should be evaluated in synovial fluid.

TNCC
Can be determined by hematology analyzers o by manual methods (hemocytometer).

Cytology
Necessary to determinate de cellular pattern in the sample.

Biochemical analysis
The biochemical analysis includes a determination of the total protein concentration, the density and other determinations as need.

INTERPRETATION

Laboratory evaluation results permit classify pleural and peritoneal effusion in transudates or exudates. Figure 2 is a summary of the principal characteristics of each one. The synovial fluid is classified, principally, in neoplastic process or non-neoplastic. The non neoplastic processes are divided in inflammatory or non inflammatory (Figure 3).

BIBLIOGRAPHY


