

T/A Effusion Formed Elements Report (19 items)

No.: 260114002	Sample type: Ascites	Pet name: dogxfs	Species: Dog	Gender:
L I S :	Doctor:	Owner:	Pet age: Y M	Weight: kg
Color: Colorless	Clarity: Turbid	Smell: Smelly	Protein concentration: Protein <2.5 g/dL	

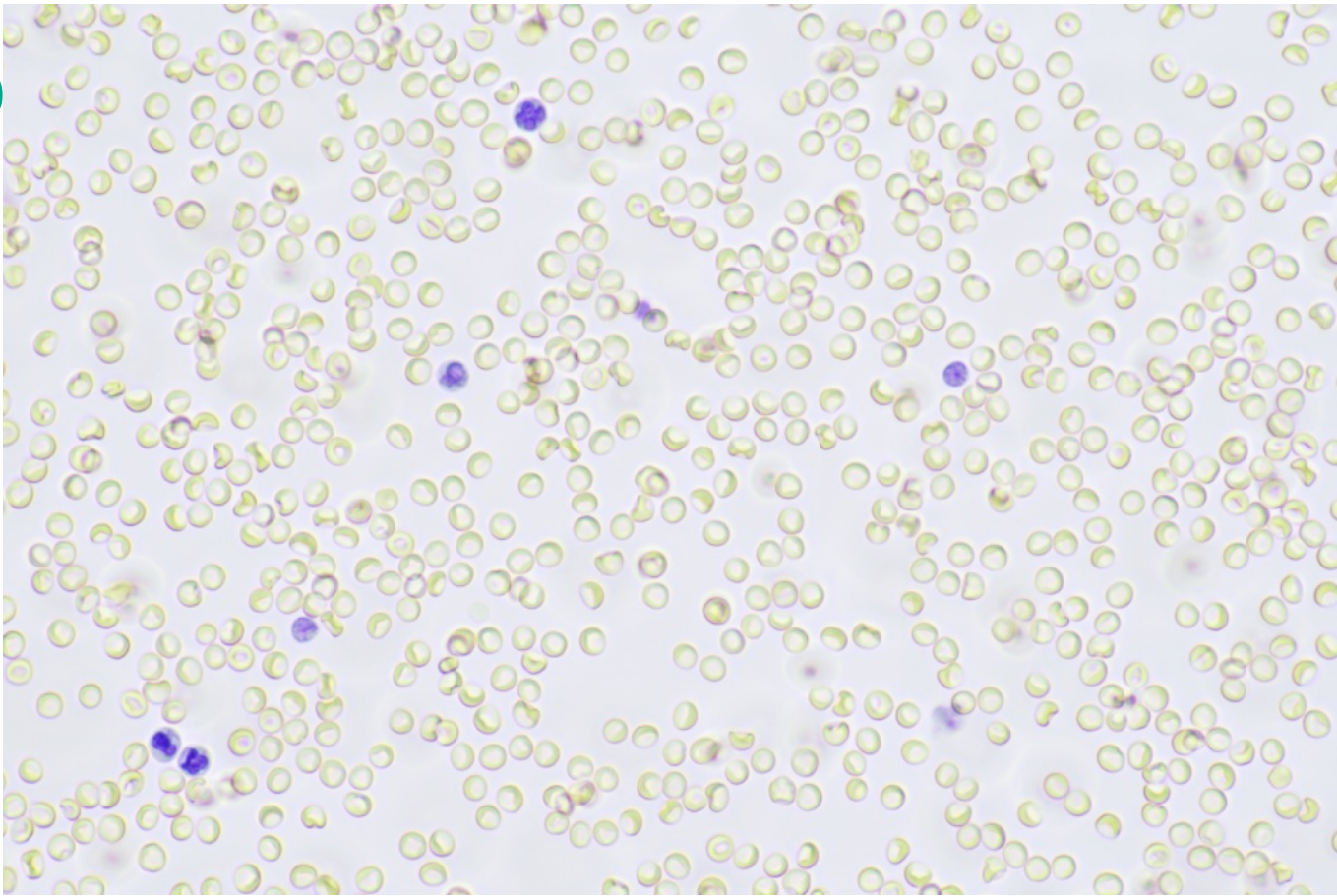
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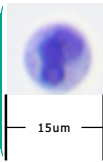
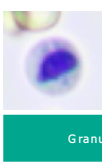
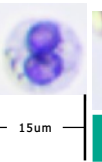
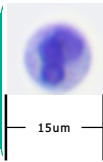
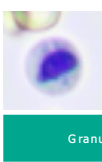
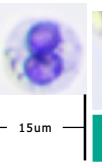
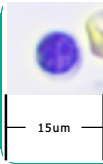
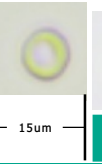
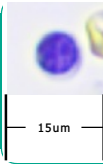
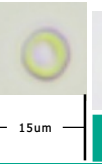
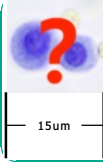
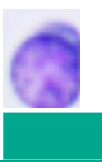
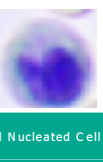
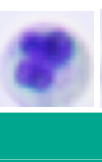
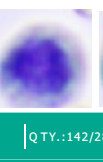
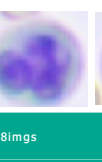
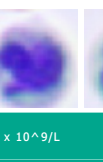
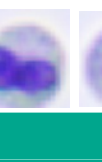
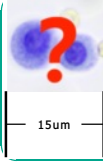
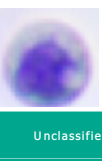
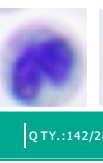
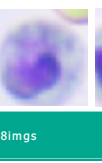
Detection items	Result	Unit	Reference	Negative	Positive
1.Nucleated Cell					
1-1.TNCC#(Total Nucleated Cell Count)	7.70	10 ⁹ /L	0-0		+++
1-2.INC#(Inflammatory Cell)	3.36	10 ⁹ /L	0-0		+
1-3.GRL#(Granulocyte)	2.69	10 ⁹ /L	0-0		+
1-4.NEU#(Neutrophil)	2.02	10 ⁹ /L	0-0		+++
1-5.HYD#(Degenerative Neutrophil)	0.67	10 ⁹ /L	0-0		+
1-6.NEU/GRL	75.00	%			
1-7.HYD/GRL	25.00	%			
1-8.LYM#(Lymphocyte)	0.67	10 ⁹ /L	0-0		+
1-9.MAPC#(Macrophage)	0.00	10 ⁹ /L	0-0	—	
1-10.GRL/TNCC	34.92	%			
1-11.LYM/TNCC	8.73	%			
1-12.MAPC/TNCC	0.00	%			
1-13.MEC#(Mesothelial Cell)	0.00	10 ⁹ /L	0-0	—	
1-14.PHC#(Phagocytosis)	0.00	10 ⁹ /L	0-0	—	
1-15.UCC#(Unclassified Nucleated Cell)	4.34	10 ⁹ /L			
2.RBC					
2-1.RBC#	7686.88	10 ⁹ /L	0-0		+++++
2-2.HCT	52.75	%			
3.Microorganisms					
3-1.BAC#(Rods)	0.00	/uL	0-0	—	
3-2.COS#(Cocci)	0.00	/uL	0-0	—	

T/A Effusion Morphology Report

No.: 260114002	Sample type: Ascites	Pet name: dogxf	Species: Dog	Gender:
LIS:	Doctor:	Owner:	Pet age: Y M	Weight: kg

Cell Distribution Image



 15um														Granulocyte	QTY.:88/294imgs	Co.:2.69 x 10 ⁹ /L
 15um														Degenerative Neutrophil	QTY.:22/294imgs	Co.:0.67 x 10 ⁹ /L
 15um														Lymphocytes	QTY.:22/294imgs	Co.:0.67 x 10 ⁹ /L
 15um														RBC	QTY.:68056/294imgs	Co.:7686.88 x 10 ⁹ /L
 15um														Unclassified Nucleated Cell	QTY.:142/288imgs	Co.:4.34 x 10 ⁹ /L
 15um														Unclassified Nucleated Cell	QTY.:142/288imgs	Co.:4.34 x 10 ⁹ /L

Diagnostic Recommendation

1. **【Smelly】** Commonly found in septic exudates.
2. **【RBC#>0.00】** Commonly observed in cases of bleeding or blood contamination during puncture.
3. **【HCT>2.50】** Indicates the presence of hemorrhagic effusion.

It is essential to consider whether the animal has a history of trauma. In cases of acute traumatic bleeding, morphological images may reveal the presence of platelets or platelet aggregates, with occasional observation of erythrophagocytosis. In chronic traumatic bleeding, erythrophagocytosis is commonly observed, while platelets are absent.

If the animal has no history of trauma, a thorough assessment of coagulation function is required. If coagulation function is normal, it is necessary to evaluate the potential presence of tumors or infiltrative lesions within the body cavity.

4. **【Protein <2.5 g/dL TNCC#>5.00 TNCC#<10.00】** Indication of modified transudate or exudate. A comprehensive evaluation should be made considering the specific protein content, specific gravity, and cellular component proportions of the sample.

Diagnostic criteria:

- Modified transudate: Total protein between 2.5 and 5 g/dL, specific gravity between 1.017 and 1.025.
- Exudate: Total protein > 3 g/dL, specific gravity > 1.025.

The primary difference in cellular components lies in the proportion of neutrophils, with neutrophils being the predominant cells in exudates.

Reference: "Clinical Laboratory Diagnostics for Small Animals," 5th edition.

Exudates are typically associated with inflammatory, necrotic, infectious, or malignant conditions. They can be classified as septic or non-septic, with septic exudates involving bacterial and/or fungal infections.

Septic exudates are commonly seen in cases such as purulent pleural or abdominal effusions, gastrointestinal perforations, abscesses, late-stage bile peritonitis, late-stage uroperitoneum, ruptured pyometra, pancreatitis, sepsis, and postoperative infections.

Non-septic exudates are often found in tumors, physical trauma, chronic chylous effusions, eosinophilic granulomas, and similar conditions.

When bacterial or fungal infection is strongly suspected, it is recommended to perform microbial culture to confirm the diagnosis.

Modified transudates are a specialized form of transudate, characterized by an increase in protein or cellular content from non-inflammatory or mildly inflammatory sources. These are commonly associated with cardiovascular disease, tumors, chylous leakage (chylothorax/abdomen), uroperitoneum, bile peritonitis, intrathoracic or intra-abdominal hemorrhage, liver dysfunction, lung lobe torsion, diaphragmatic hernia, hyperthyroidism, and glomerular nephropathy.

For accurate diagnosis, it is advised to consider the animal's life history, medical history, and physical examination findings. Key diagnostic considerations should include cellular parameters in thoracic or abdominal effusion analysis, biochemical analysis of peritoneal fluid, and urinary protein levels. Additionally, results from cardiac and abdominal imaging should be integrated for a comprehensive evaluation.