

Coelomic Fluid from a Chicken

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Current address: Animal Health Trust, Lanwades Park, Kentford, Newmarket, UK.

SPECIMEN: Coelomic fluid

SIGNALMENT: 3 year old female game hen

HISTORY AND CLINICAL FINDINGS: 1 week prior to presentation, the owner noted that the patient's abdomen had an orange-sized soft swelling. The patient subsequently became progressively hyporexic to anorexic, and the swelling became larger, flatter, and more diffuse. The patient stopped laying eggs 1 year prior to presentation after going through moulting, and had not laid any eggs since. Previous medical history included a broken jaw, congenital malformation of the keel, mites, lice, and exposure to *Mycoplasma* and Marek's disease. She was rescued from a cock-fighting ring 2 years previously.

On presentation, the patient was quiet, alert and responsive. In addition to abdominal distension, 3-4 small white plaques were noted within the oral cavity.

IMAGING FINDINGS: Coelomic cavity: severe amount of hypoechoic, echogenic fluid; remainder of the coelom diffusely hyperechoic; marked mass effect of abdominal organs, cranially. 400 mL fluid obtained. Multiple round, tubular, hyperechoic structures visible and free floating within the free fluid.

HAEMOGRAM:

WBC obtained indirectly by Unopette method and slide differential count

TEST	UNITS		REFERENCE VALUES*
Total protein	g/dL	5.0	3.3-5.5
PCV	%	30	23-55
Thrombocytes	x 10 ³ /μL	Present, adequate	n/a
WBC	x 10 ³ /μL	19.7	9-32
Heterophils	x 10 ³ /μL	8.9 (45%)	15-50%
Lymphocytes	x 10 ³ /μL	6.5 (33%)	29-84%
Monocytes	x 10 ³ /μL	2.8 (14%)	0.1-7%

Eosinophils	x 10 ³ /μL	0.8 (4%)	0-16%
Basophils	x 10 ³ /μL	0.8 (4%)	0-8%
Erythrocyte morphology	Moderate polychromasia (6-10 polychromatophilic erythrocytes/hpf).		
Leukocyte morphology	Mild toxic change. Many smudged/lysed cells seen.		

* Johnson-Delaney C.A., Harrison L.R., eds. Exotic Companion Medicine Handbook for Veterinarians. Lake Worth, FL: Wingers Publishing; 1996.

COELOMIC FLUID:

Gross appearance: Yellow, cloudy

RBC and TNCC: Not obtainable by analyser, manual count by haemocytometer not performed

Total protein: 6.0 g/dL

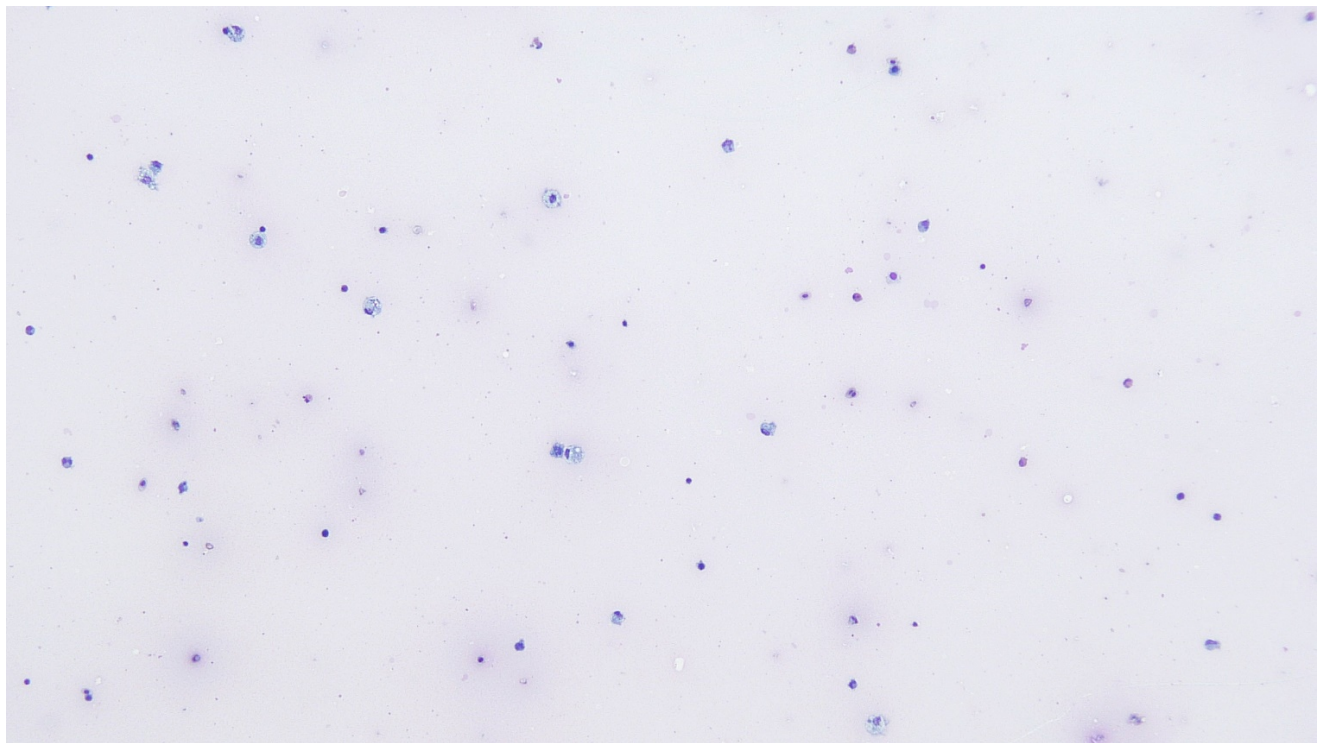


Figure 1: Direct smear of coelomic fluid, 10x objective, automated Wrights-Giemsa stain

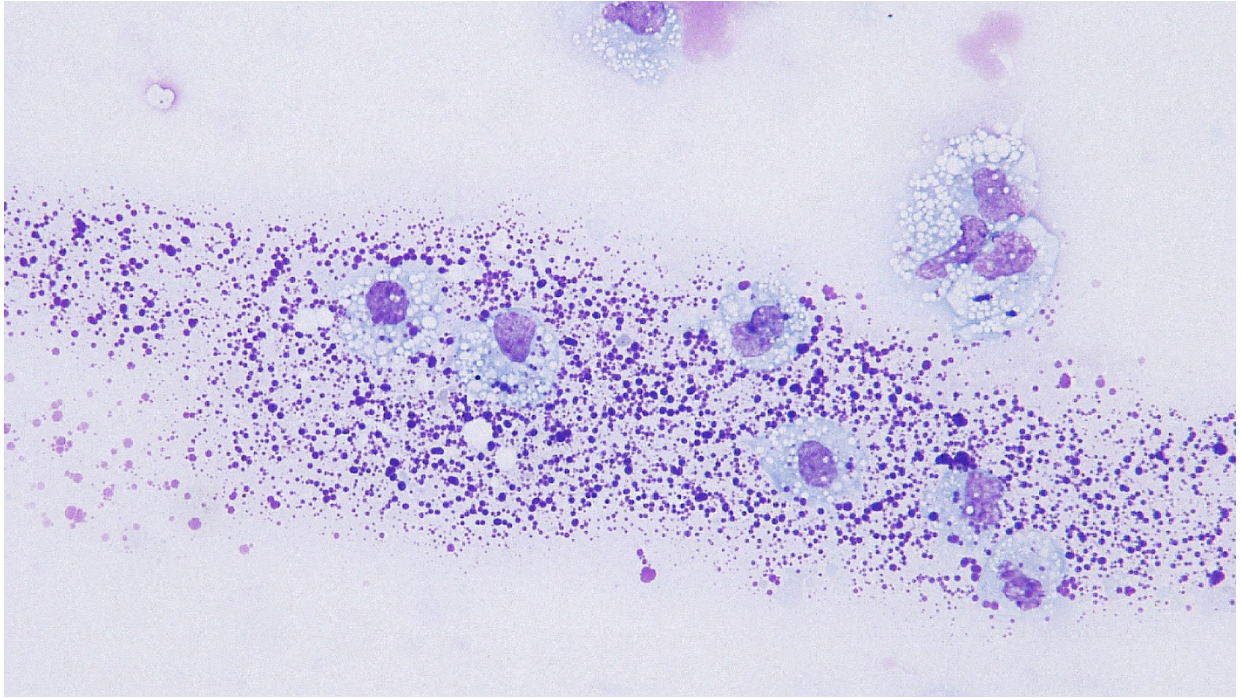


Figure 2: Direct smear of coelomic fluid, feathered edge, 50x objective, automated Wrights-Giemsa stain

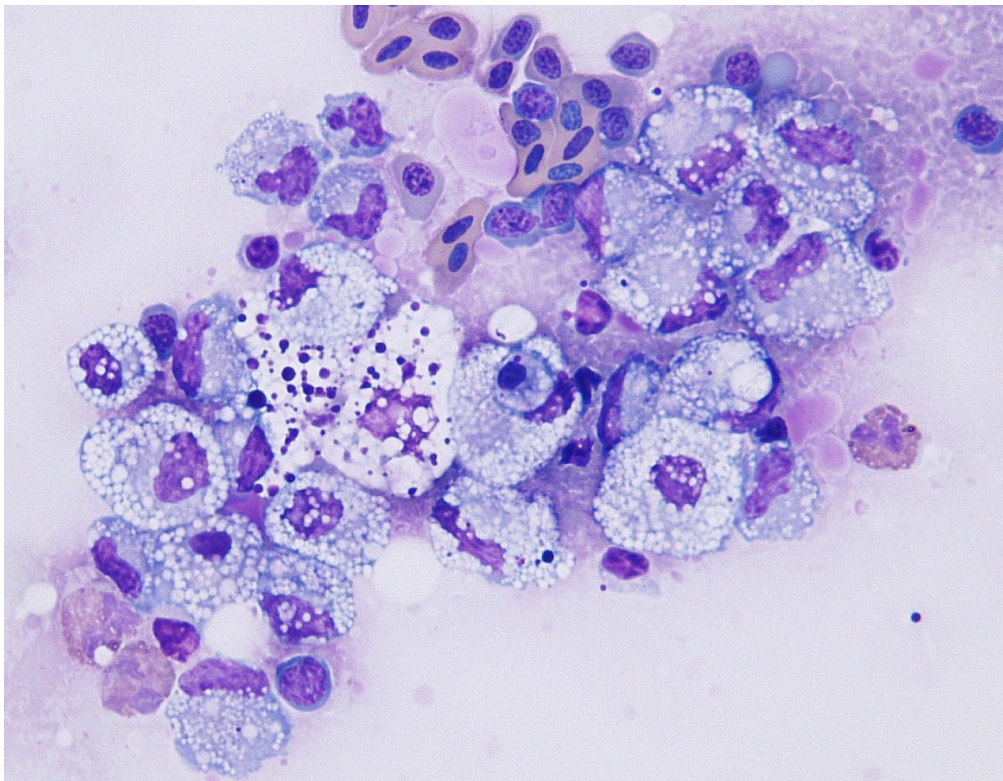


Figure 3: Cytocentrifuged preparation of coelomic fluid, 50x objective, automated Wrights-Giemsa stain

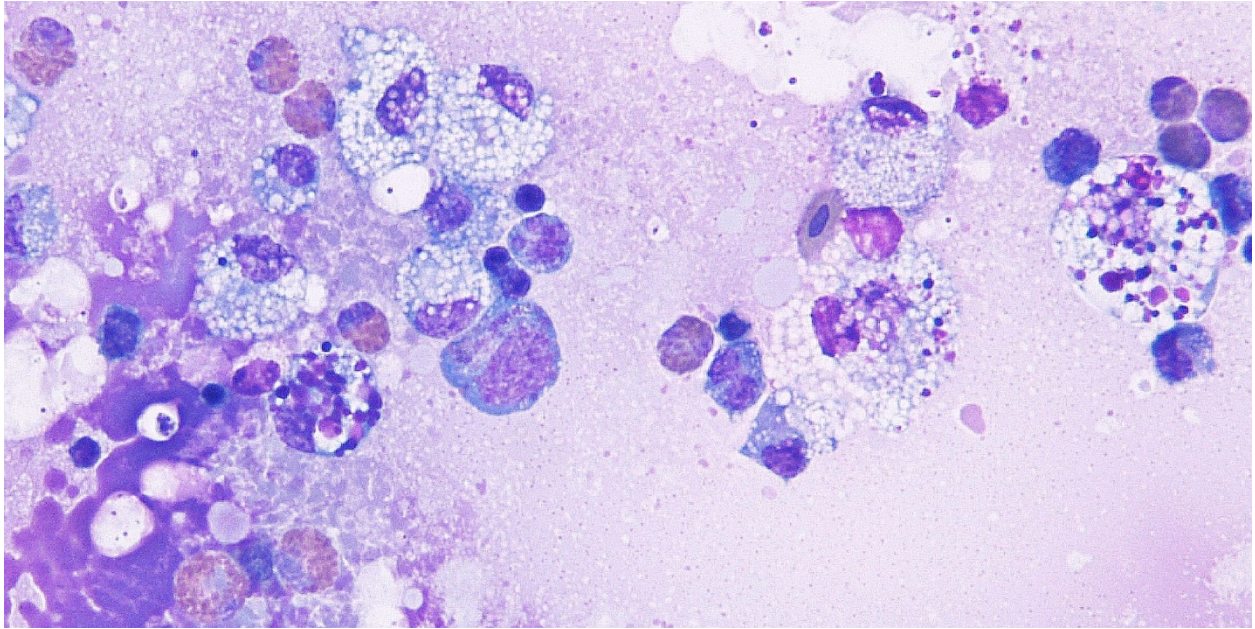


Figure 4: Cytocentrifuged preparation of coelomic fluid, 50x objective, automated Wrights-Giemsa stain

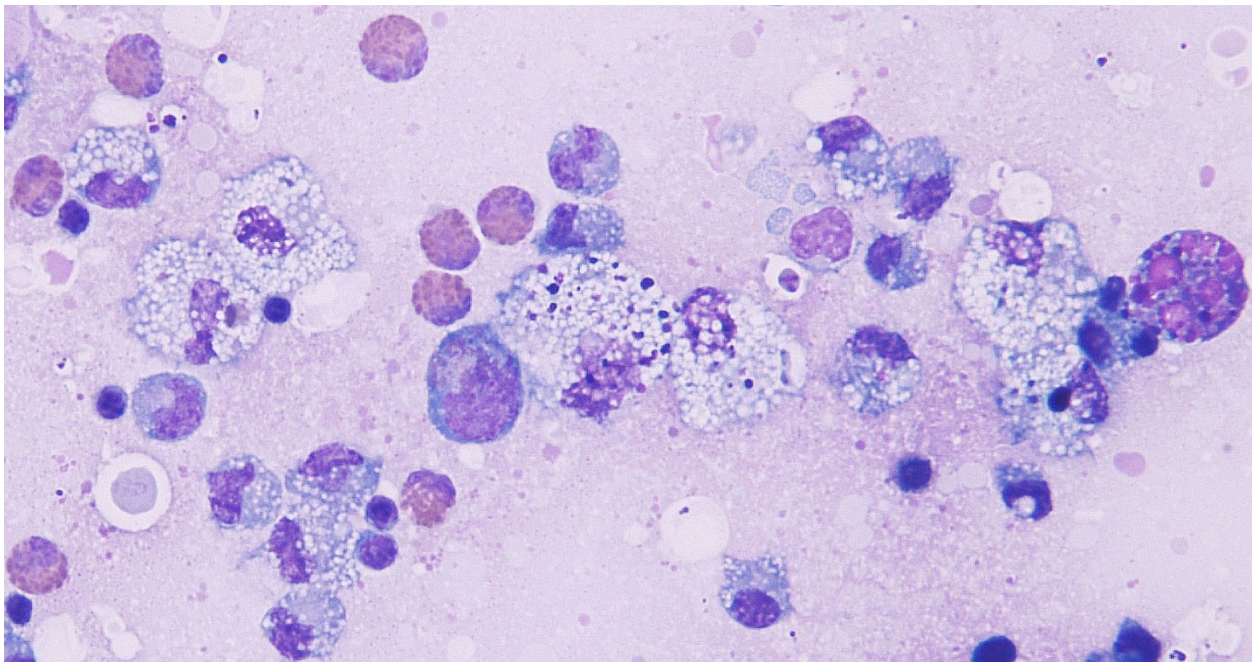


Figure 5: Cytocentrifuged preparation of coelomic fluid, 50x objective, automated Wrights-Giemsa stain

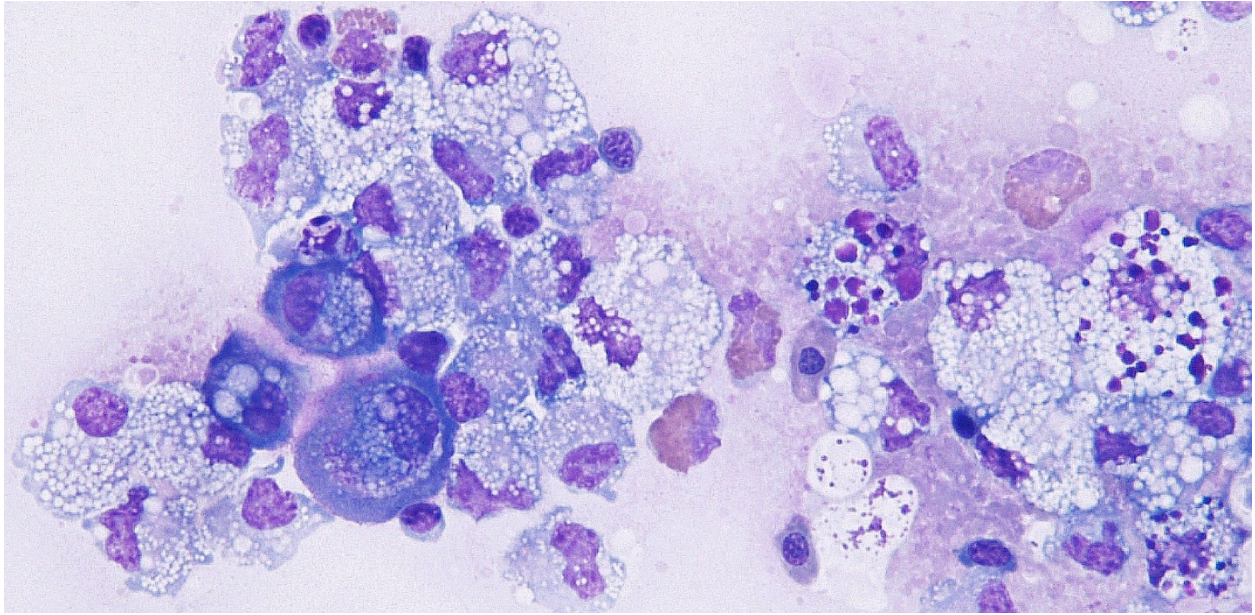


Figure 6: Cytocentrifuged preparation of coelomic fluid, 50x objective, automated Wrights-Giemsa stain

QUESTIONS

- 1) What cell populations are present in this fluid?
- 2) What processes could have caused their presence?
- 3) What is the cytologic diagnosis?