

## Poster Presentation (PF-1)

### Endometritis in Mix Breed Dog

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#### INTRODUCTION

Endometritis is an inflammation that happens in the endometrial tissue in the uterus that caused by pathogen bacterial infection [1]. Inflammation in the uterus also can be caused by hormonal problem, post partus secondary infection, and distocia [2]. Endometritis without any proper medication can develop into pyometra.

#### CASE REPORT

- **Signalment.** Mix breed dog, ± 1 year old, female, 8 kg, white and black spots color, named "Marie".
- **Anamnesis.** This dog came to the clinic after being rescued because she was abandoned by the owner; the history of this dog is unknown.
- **Clinical/Pathological Signs.** Physical examination shows that Marie has some alopecia, mild enlargement of the mammary glands, aggression especially when palpation in the abdomen is applied, and stress. Temperature: 40°C, Heart rate: 142 times per minute, respiratory rate: 54 times per minute, normal color of the mucous membrane, CRT < 2 seconds, and good pupil response.
- **Result of Laboratory Assay.** According to the signalment, anamnesis, and clinical signs we do the laboratory assay as shown in the picture below.

Table 1. Hematology result for Marie

Item	Scale	Result	Normal rate (*)	Note
WBC	10 <sup>3</sup> /mm <sup>3</sup>	30,8	6-17	H
Lymphocyte	10 <sup>3</sup> /mm <sup>3</sup>	0,3	0,8-5,1	L
Monocyte	10 <sup>3</sup> /mm <sup>3</sup>	1,9	0-1,8	H
RBC	10 <sup>6</sup> /mm <sup>3</sup>	4,79	5,5-8,5	L
Hb	g/dL	9,5	12-18	L
MCHC	g/dL	31,1	30-38	
MCH	Pg	19,8	20-25	L
MCV	fL	63,7	62-72	
HCT	%	30,5	37-55	L
PLT	10 <sup>6</sup> /mm <sup>3</sup>	117	200-500	L

\*Swenson 1984 [3]



Figure 1. Enlargement of Marie's uterus (black arrow), multiple cysts (brown arrow)

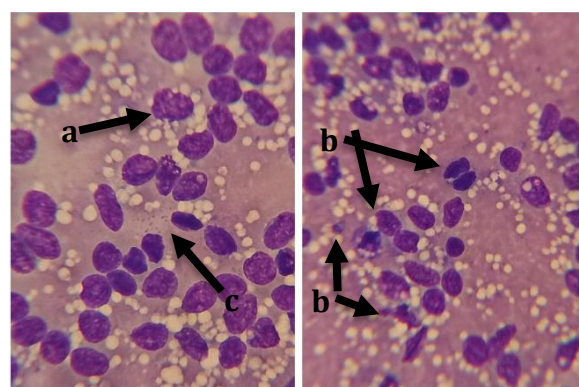


Figure 2. Cytology of the uterus (1000x) (a. Endometrial cell; b. Inflammatory cells (neutrophil, lymphocyte and macrophage), and c. Bacterial infection)

- **Differential Diagnosis.** According to the signalment, anamnesis, clinical signs, and laboratory assay we can make differential diagnosis that Marie has endometritis, ovarian cyst, or pyometra.
- **Diagnosis.** Endometritis.
- **Prognosis.** Fausta.
- **Therapy.** Surgery.



Picture 3. Marie's uterus dan ovarium post ovariectomy, thickening of the uterine cornua (black arrow)

## DISCUSSION

Clinical sign and physical examination show that Marie has high temperature and sensitive response when abdominal palpation applied, these are common symptoms of endometritis [4]. By clinical pathology we found leucocytosis, lymphocytopenia, monocytosis, normocytic normochromic anemia, and thrombocytopenia. These are indications of chronic infection and bleeding. Cytology shows that there are coccus form bacteria, stromal expansion found with multifocal edema, bleeding, infiltration of plasma cells, lymphocyte, macrophage, some neutrophils, and mast cells which are the signs of cystic hyperplasia in the endometrium [5]. Uterus enlargement and multiple vacuoles with fluid that showed in the ultrasound also confirm for the endometritis diagnosis [6]. Surgical therapy was selected because of a risk of high level infection and to prevent pyometra. Surgical therapy is one of the treatments for endometritis [1].

## CONCLUSION

Endometritis in this case report can be diagnosed by signalment, anamnesis, clinical signs, and laboratory assay (hematology, cytology, and ultrasound), the therapy was surgical therapy and the prognosis is fausta.

## ACKNOWLEDGMENT

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