Canine pyometra: a retrospective study of 21 cases
Daesik Kim, Hoyoung Kang, Cheolkyu Han, Hyunsuk So, Donghee Park, Youngung Kim, Namsoo Kim
Department of Veterinary Surgery, College of Veterinary Medicine, Chonbuk National University, Iksan, Korea

Purpose
Pyometra is a common life-threatening disease of intact bitches caused by the hormonal effects on the uterus, with bacterial infections. This should be differentiated with hydrometra, hematometra and mucometra. Pyometra can be treated with medical therapy or surgery. From 2015 to 2016, 21 cases diagnosed with pyometra were treated with ovariohysterectomy at Chonbuk National University Animal Hospital.

Materials and methods
The bitches selected were diagnosed with pyometra and were treated with ovariohysterectomy. Criteria evaluated included the percent ratio of ovaries and uterus to body weight, antibiotic susceptibility, open or closed type, age, and type of fluid discharged. The antibiotic susceptibility test was categorized as ampicillin (AM10), amikacin (AN30), cefazolin (CZ30), enrofloxacin (ENR5), amoxicillin/clavulanic acid (AmC30), sulfamethoxazole/trimethoprim (SXT), clindamycin(CC2) and metronidazole (MTZ5).

Results
The average weight of the ovaries and uterus was 6.5% (2.2 ~ 10%) of the body weight. When antibiotic susceptibility was established, the effective ratio of the corresponding antibiotic was confirmed. The results were as follows: ampicillin (AM10) 0%, amikacin (AN30) 52%, cefazolin (CZ30), enrofloxacin (ENR5) 29%, amoxicillin/clavulanic acid (AmC30) 38%, sulfamethoxazole/trimethoprim (SXT) 43%, clindamycin 10% (CC2), and metronidazole (MTZ5) 10%. The average age was 7.5 (2 to 15) years old. Twenty three percent of bitches showed closed type. The types of fluids discharged were pyometra 88%, hematometra 4%, mucometra 8% and hydrometra 0%.

Conclusion
We checked statistics of various features of pyometra, such as percent ratio of ovaries and uterus to body weight, antibiotic susceptibility, open or closed type, age and type of fluid discharged. Through accumulating more data, it is anticipated that more effective treatment will be possible for the pyometra.

Keywords: Pyometra, antibiotic susceptibility, bitch