
RETROSPECTIVE ANALYSIS OF PYOMETRA IN THIRTY-EIGHT CAPTIVE LARGE FELIDS

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Abstract

From 2003-2014, there were 38 cases of pyometra in a captive exotic felid collection of over 300 non-domestic felids, including 11 previously reported cases.¹ Fisher's exact tests were used to compare prevalence, and student's t tests were used to compare means. The prevalence of pyometra in lions (*Panthera leo*; 13/30, 43.3%) was significantly greater than that in tigers (*P. tigris*; 21/128, 16.4%; $P = 0.0026$). Only one tiger was known to have received contraception prior to developing pyometra. The average (\pm SD) age of the tigers at time of diagnosis (12.6 ± 2.8 yr) was significantly greater than that of lions (10.15 ± 2.38 yr; $P = 0.0145$). One lion died under anesthesia for ovariohysterectomy, and one tiger was found dead secondary to pyometra. The outcome after ovariohysterectomy overall was good. Average lifespan after treatment was not significantly different between lions and tigers, with a mean of 3.57 ± 2.01 and 2.81 ± 2.10 yr, respectively ($P = 0.49$). White blood cell counts were significantly greater in lions ($30.2 \pm 13.5 \times 10^3$) than in tigers ($16.3 \pm 7.2 \times 10^3$; $P = 0.0008$). On histopathology, lions had a statistically significant increase in frequency of cystic endometrial hyperplasia (CEH) compared to tigers ($P = 0.0248$). There was no significant difference between the frequency of lions and tigers with at least one corpus luteum present on at least one ovary ($P = 0.4706$). These findings show that lions are at an increased risk for developing pyometra as compared to tigers, possibly due to increased risk of CEH development.

Key words: Cystic endometrial hyperplasia, leopard, lion, pyometra, tiger

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LITERATURE CITED

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