

Poster Presentation (PF-5)

Case Study: The FLUTD (Feline Lower Urinary Tract Diseases) Incidence on Cats in Qithmir Pet Care Jombang Year 2013-2017

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Keywords: cat, FLUTD, urinary.

INTRODUCTION

Feline Lower Urinary Tract Diseases (FLUTD) is a disorder or disease of the lower urinary tract in cats known daily as the Urinary Tract Infection (UTI) on the lower or upper part of the tract. In daily practice at Qithmir Pet Care, patients are often present with complaints (signalment) from the owner of *dysuria* (urinating difficulty), *stranguria* (pain in urinating process), *polakiuria* (frequent urination in small amounts), *haematuria* (bloody urine), *periuria* (urinate carelessly) and frequent licking of the genitals with decreased appetite, *lethargy* and vomiting, even in some cases patients come with a critical condition, where various complaints lead to the diagnosis of FLUTD. The purpose of this study are recording, write, and storage data to determine the number of case and the pattern or period of the disease. As an effort to fulfill and supply diagnostic tools, medical equipments, medicines and operator or medical

capability in handling the FLUTD case.

CASE REPORT

- The incidence of FLUTD is obtained from monthly case report at Qithmir Pet Care Jombang as accountability to the Livestock and Fishery Department of Jombang (Dinas Peternakan dan Perikanan Kabupaten Jombang). FLUTD is one of the main topics reported in the monthly report because it belongs to the emergency category that requires quick and precise handling.
- The percentage of FLUTD disease happened to the medically ill patients in the year of 2013, then observed and compared with the percentage of FLUTD in 2014, 2015, 2016, 2017.

Tale 1. Case report 2013

No	Disease cases	Month												Total
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
1	ISPA	0	3	3	7	1	3	6	2	10	3	17	14	69
2	GIT	29	11	18	19	18	15	18	16	12	8	12	19	195
3	INTERNA	15	4	1	4	5	7	14	5	6	8	11	15	95
4	DERMA	23	43	30	49	41	42	49	24	82	85	73	90	631
5	FLUTD	0	1	0	4	4	2	2	3	2	1	0	3	22
6	Others	7	5	6	11	9	6	13	8	7	11	33	26	142
Total		74	67	58	94	78	75	102	58	119	116	146	167	1154

Table 2. Case report 2014

No	Disease cases	Month												Total
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
1	ISPA	10	8	5	7	8	7	5	4	5	3	10	8	80
2	GIT	19	27	13	7	16	13	9	5	15	12	24	15	175
3	INTERNA	28	12	7	12	12	9	4	1	4	4	10	20	123
4	DERMA	92	142	100	91	114	66	100	58	125	120	146	143	1297
5	FLUTD	4	4	2	7	4	3	1	3	6	7	8	5	54
6	Others	36	42	68	31	31	32	37	31	24	20	24	23	399
Total		189	235	195	155	185	130	156	102	179	166	222	214	2128

Table 3. Case report 2015

No	Disease cases	Month												Total
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
1	ISPA	15	7	8	7	5	10	12	13	7	3	1	4	92
2	GIT	15	30	12	9	18	8	5	22	33	35	26	19	232
3	INTERNA	20	1	6	4	1	17	2	1	23	20	14	12	121
4	DERMA	116	91	113	124	136	100	101	121	130	102	203	194	1531
5	FLUTD	7	5	5	6	9	1	1	9	10	13	9	11	86
6	Others	54	28	33	33	98	27	50	66	48	15	49	43	544
Total		227	162	177	183	267	163	171	232	251	188	302	283	2606

Table 4. Case report 2016

No	Disease cases	Month												Total
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
1	ISPA	15	22	5	3	5	10	10	13	7	0	8	4	102
2	GIT	15	30	19	35	23	8	4	22	32	37	26	19	270
3	INTERNA	20	28	6	6	1	19	4	1	23	18	144	12	282
4	DERMA	116	119	195	215	136	118	123	121	130	172	7	194	1646
5	FLUTD	7	8	1	19	12	2	1	9	10	6	7	11	93
6	Others	54	27	33	43	63	27	50	66	48	30	35	43	519
Total		227	234	177	321	240	184	192	232	250	263	227	283	2912

Table 5. Case report 2017

No	Disease cases	Month												Total
		Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
1	ISPA	8	10	8	5	4	7	4	3	4	5	12	8	78
2	GIT	31	19	27	13	14	6	7	20	5	9	8	11	170
3	INTERNA	34	28	12	7	1	2	5	7	1	6	0	11	114
4	DERMA	125	92	142	100	167	117	230	141	58	117	122	159	1570
5	FLUTD	7	4	4	2	9	7	5	7	3	1	3	4	56
6	Others	39	36	42	68	31	15	28	34	31	18	10	25	377
Total		244	189	235	195	240	154	279	212	102	165	155	218	2365

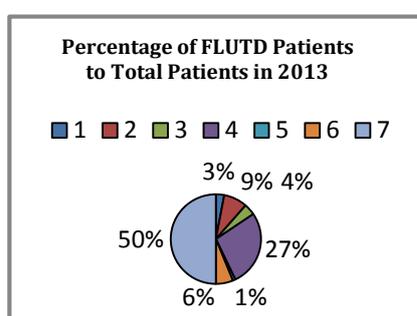


Figure 1. Case report 2013

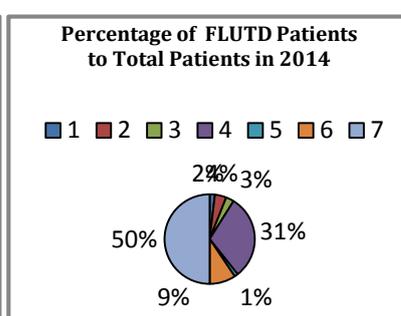


Figure 2. Case report 2014

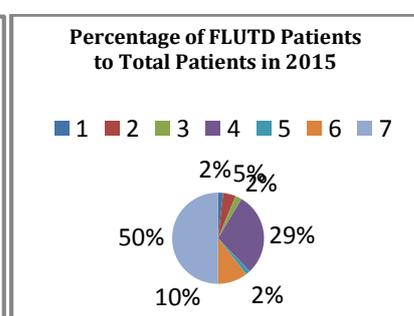


Figure 3. Case report 2015

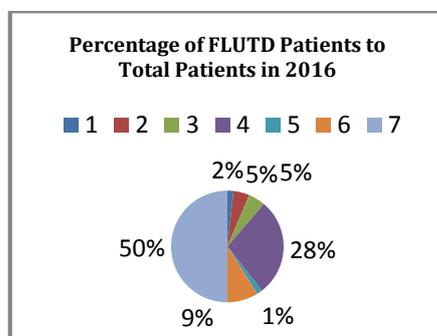


Figure 4. Case report 2016

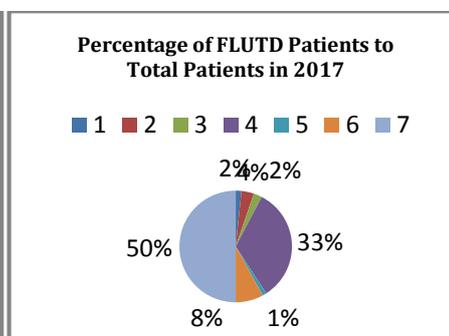


Figure 5. Case report 2017

DISCUSSION

Infections of the lower urinary tract in cats or better known as FLUTD/UTI (Feline Lower Urinary Tract Disease/Urinary Tract Infection) is a term for several common diseases with different causes. An American study on educational veterinary hospitals statistically showed that 8% of cases happened in cats were FLUTD, while another statistic from independent or self-directed practice has 3% of FLUTD cases from all the cat patients. FLUTD could possibly occur at different ages and cat phases. The percentage of FLUTD disease that has happened to the patients at Qithmir Pet Care in 2013 is 1%, 2014 is 1%, 2015 is 2%, 2016 is 1%, and in the year of 2017 is 1%.

The cause of FLUTD can be various, it could be from idiopathic or unknown exact origin and cause,

which occupies 55 - 63% of the causes of FLUTD. Another causes are urinary calculi 22%, plugs at urethral 10%, or urinary tract infection 8%. Neoplasia and diseases of the central nervous system may also cause FLUTD. The role of diagnostic support equipment in the case of FLUTD is immensely needed, with expectation that the provision of therapy could be more precise and fast, with some examples below:

- Urinalysis to determine urinary abnormalities, urine biochemistry, sediment evaluation, type of calculi examination.
- USG and X-Ray to describe the presence or absence of calculi in the urinary tract and the sign of inflammation.

- Blood examination to determine the status of urea in the blood and also the kidney function of the patient.

Appropriate treatments to FLUTD are:

- Restore the flow of urine to normal.
- Restores the body metabolism balance to treat the side conditions of FLUTD such as hyperkalemia or acidosis.
- Eliminating the pain of giving antibiotics to the infection is also a therapy given for this case.

Prevention:

- Reduce the causal factors such as environmental stress, so the causes of idiopathic FLUTD can be avoided.
- Easy access for the cat to eat, drink and litter.
- Provide good quality of feed and availability of clean water is also a way to avoid the disease.
- The disease can occur during the weather transition from drought to rain or in rain season because cats will likely reduce their activity and experienced a decline in conditions.

CONCLUSION

The FLUTD cases at Qithmir Pet Care Jombang in 2013, 2014, 2015, 2016, and 2017 was 1.2% of all patients at the same period. The number of cases increases every 3 (three) months at the end of each semester.

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