

日本猿の体重と臓器重量(2)

誌名	山口獣医学雑誌
ISSN	03889335
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巻/号	12号
掲載ページ	p. 97-100
発行年月	1985年11月

BODY AND ORGAN WEIGHTS AND THE LENGTH OF INTESTINE OF JAPANESE MONKEY (*MACACA FUSCATA*) II

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(Received for publication : September 25, 1985)

INTRODUCTION

In our previous paper (Makita *et al.* 1984), body weight, the weight of 23 organs, and the length of intestine of 20 Japanese monkeys (16 males and 4 females) were recorded. They were also compared with those of 6 Formosan monkeys (4 males and 2 females). This is an additional record of body weight, organ weight and the length of intestine of another troop of wild Japanese monkeys of 5 males and 3 females.

MATERIALS AND METHODS

A total of 8 Japanese monkeys (*Macaca fuscata*) captured in Takasaki Mountain in Oita Prefecture in the fall of 1985 were sacrificed under anesthesia with Nembutar and Ketalar. Each monkey was first weighed and tissue samples of aorta were dissected out for electron microscopy. Then 23 major organs listed in Table 1 were weighed. The weight of the gall bladder was included in the liver first and then the weight of the liver was recorded separately. Each weight of gall bladder included that of the bile juice. The weight of the stomach did not include the content. One of the old male monkeys had only a trace of the thymus and its weight was not measured. The length of intestine (Table 2) was divided into the small intestine, cecum and the rest of large intestine (colon and rectum).

RESULTS

Table 1. Organ weight of 8 wild Japanese monkeys.

Table 2. Length of the intestine of 8 Japanese monkeys.

DISCUSSION

Body weight and organ weights of rhesus monkeys (*Macaca mulatta*) have been recorded. (Cupp and Uemura 1981, Fremming, Benson and Young, 1955, Kennard and Willner 1941, Kerr *et al.* 1966, Van Wagenen and Catchpole 1956). Those of Japanese monkeys are not available except for our previous report. (Makita *et al.* 1984). As an extension work of it and anatomical record of the Japanese monkey (Makita, Shirogane and Kiwaki, 1982), the present data of 8 wild Japanese monkeys are expected to be increased with additional data of other groups of Japanese monkeys. It is obvious that the data so far obtained are too small to analyse the difference between sex, age and the troops as well as developmental growth. However, they would be valuable in the future as a part of cumulative data. One of our interrests is focused on the occurrence of doublet gall bladder of the Japanese monkey (Makita *et al.* 1984). There was no specimen of the doublet gall bladder examined in this study. Brain was not included in this study because it was used for the study of veins (to be published in the future).

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Table 1 Organ weights and body weight of the wild Japanese monkeys (*Macaca fuscata*)

	Code number (sex)	21 (male)	21 (male)	23 (male)	24 (male)	25 (male)	26 (female)	27 (female)	28 (female)
Body weight(kg)		10.0	10.0	5.5	4.5	4.7	7.5	5.6	5.2
Organs (gm)									
Heart		59.66	59.09	30.95	20.72	21.96	33.39	32.52	25.18
Lung		67.86	85.73	39.16	28.01	27.22	43.32	34.89	50.09
Spleen		10.84	27.45	7.33	3.69	3.24	5.29	5.58	3.40
Kindney (left)		24.82	23.17	18.86	9.91	11.68	15.52	14.36	19.42
(right)		25.82	20.60	18.43	12.88	14.37	16.20	14.11	19.45
Urinary bladder		7.70	8.35	5.34	3.68	3.15	7.46	3.92	6.10
Liver		206.56	242.93	135.97	84.09	98.55	150.42	133.41	82.14
Gall bladder		14.14	17.33	5.94	8.18	9.15	11.69	8.38	16.48
Pancreas		21.41	19.87	10.73	12.02	9.19	10.95	9.12	9.04
Parotid gland (left)		28.94	35.25	15.57	13.98	7.77	13.46	10.69	9.51
(right)		33.06	32.16	16.23	14.47	9.35	14.07	10.24	8.94
Submandibular gd. (left)		2.81	4.13	5.23	5.93	1.31	1.73	1.76	1.52
(right)		3.51	3.79	5.30	5.13	1.64	1.81	1.76	1.49
Stomach		80.04	86.67	44.07	28.19	31.01	47.14	33.70	50.20
Thymus		1.50	*	5.49	2.13	1.48	4.6	2.94	0.14
Adrenal gland (left)		1.12	0.99	0.99	0.66	0.71	0.99	0.99	1.11
(right)		2.07	1.56	0.80	0.40	0.43	0.77	0.47	0.88
Thyroid gland (left)		0.70	1.52	0.39	0.42	0.24	0.34	0.39	0.18
(right)		0.64	1.27	0.23	0.33	0.17	0.50	0.40	0.28
Eye ball (left)		5.31	4.89	4.14	6.62	4.11	4.48	4.50	4.57
(right)		4.92	4.86	4.21	3.94	4.09	4.39	*	4.45
Testis (left)		46.63	46.99	9.62	3.87	0.76			
(right)		47.77	47.01	9.17	1.09	0.74			
Seminal vesicle		105.72	70.31	13.39	1.85	0.43			
Epididymis (left)		10.11	8.99	1.71	0.35	0.25			
(right)		9.07	8.85	1.58	0.31	0.33			
Prostate gland		7.78	8.62	1.39	0.43	0.14			
Uterus							4.00	3.16	5.16
Ovary (left)							2.84	0.10	0.07
(right)							2.91	0.12	0.09
Vagina							6.85	6.62	8.23
Oviduct (left)							0.28	0.13	0.23
(right)							0.31	0.09	0.19

(*) not measured

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[受付: 1985年9月25日]

Table 2 Length of intestine of the wild Japanese monkeys (*Macaca fuscata*)

Code number (sex)	21 (male)	22 (male)	23 (male)	24 (male)	25 (male)	26 (female)	27 (female)	28 (female)
Small intestine (cm)	231.0	237.0	251.0	237.0	244.0	258.5	295.5	289.0
Cecum	5.0	6.5	4.0	4.0	3.0	3.5	5.0	4.5
Colon and rectum	99.0	89.0	93.0	47.0	62.5	63.0	78.5	77.5

前報で香川県小豆島の野生日本猿20頭の臓器重量と、台湾猿6頭の臓器重量を記録した(牧田他, 1984)が、今回大分県高崎山で捕獲された8頭(雄5頭, 雌3頭)を入手したのでその臓器重量について追加報告する。また腸管(小腸, 盲腸, 大腸)の長さを計測したのでこれも記録した。測定臓器は心, 肺, 脾, 腎, 膀胱, 肝, 胆嚢, 膵, 耳下腺, 下顎腺, 胃, 胸腺, 副腎, 甲状腺, 眼球, 精巣, 精嚢腺, 精巣上体, 前立腺, 子宮, 卵巢, 膣, 卵管の23種類である。