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Introduction

Tumor treatment with monocyte-derived dendritic cell therapy is used as part of the overall effort in oncologic treatment. For the owner, the question of **quality of life** for his dog and **possible side effects of a therapy** are an **important part of decision making**. For other treatment options in oncologic patients, studies about quality of life during the treatment are already published (e.g. chemotherapy).

Methodology

To learn more about these parameters, owners of diseased dogs treated with dendritic cell therapy were asked to answer a questionnaire. 656 questionnaires could be evaluated for this study. The questions were identical for the medical and health situation of the dog in the **week before and the week post dendritic cell treatment**. Questions involved overall health, medication, exercise and exercise time, need for rest, pain expression, food intake, anorexia, incontinence, gastrointestinal signs.

Results

The results were compared between ante and post injection of the dendritic cell therapy and showed: **The overall health status in dogs improved significantly, the same is true for the quality of life.** The dogs showed more exercise time and needed less pain medication. The owners experienced subjectively already a better quality of life because the dogs were less listless, showed less clinical signs and saw better quality of life (longer exercise time).

Discussion

The dendritic cell therapy as an immunologic treatment is a treatment option which shows a quick positive response in the health status and quality of life of dogs treated.

Data

Overall, there were 656 questionnaires answered. For some patients, the evaluation was done for multiple subsequent applications with dendritic cell therapy.

Questionnaires	1x	2x	3x	4x	5x	6x	7x	Total
# of observations	221	67	60	11	9	3	2	656

	Mean before	Mean after	Relative deviation	P-Value
Overall health status ¹	5.166	5.355	3.66 %	0.014
Overall quality of life ¹	5.416	5.640	4.14 %	0.002
Physical Effort ²	1.978	1.932	-2.33 %	0.382
Going for a walk ²	1.976	1.986	0.51 %	0.867
Impression of pain ²	1.618	1.522	-5.93 %	0.049
Medication ³	0.285	0.325	14.04 %	0.119
Panting ²	1.961	1.943	-0.92 %	0.726
Poor appetite ²	1.322	1.330	0.61 %	0.854
Help eating / defecating ²	1.132	1.141	0.80 %	0.754
Urine leakage / diarrhoea ²	1.296	1.298	0.15 %	0.947
Nausea / Vomiting ²	1.188	1.206	1.52 %	0.553
Apathetic ²	1.535	1.433	-6.64 %	0.020

¹ The scale is 1 = "very bad", 7 = "excellent".

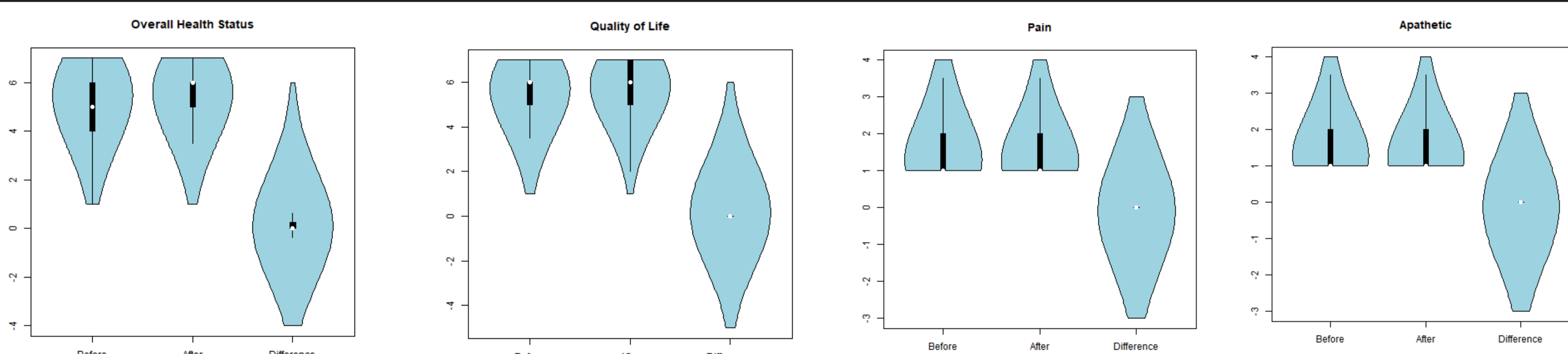
² The scale is 1 = "not at all", 2 = "few," 3 = "moderate", 4 = "very / a lot"

³ The scale is 0 = no, 1 = yes

Items of the Questionnaire

Evaluated before and after the injection of dendritic cells.

- Overall health status
- Overall quality of life
- Does your animal have difficulties with physical effort / movement?
- Does your animal have difficulties going for a walk?
- Do you have the impression that your animal has pain?
- Do you give your animal medication against the pain?
- Does your animal pant a lot?
- Does your animal have a poor appetite?
- Does your animal need help with eating or defecation / urinating?
- Does your animal have urine leakage / diarrhoea?
- Does your animal suffer nausea or vomiting?
- Is your animal apathetic?



Literature

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