Abstract HM07: Evaluation of the Therapeutic Efficacy of Splenectomy in 20 Dogs with Non-regenerative Immune-mediated Anemia

Keitaro Morishita[1]; Mei Sugawara[1]; Junpei Yamazaki[1]; Sangho Kim[1]; Kenji Hosoya[1]; Noboru Sasaki[1]; Kensuke Nakamura[1]; Hiroshi Ohta[2]; Mitsuyoshi Takiguchi[1]
[1]Hokkaido University; [2]Rakuno Gakuen University

BACKGROUND
To our knowledge, there are no reports summarizing the therapeutic effects of splenectomy in dogs with non-regenerative immune-mediated anemia (NRIMA).

HYPOTHESIS/OBJECTIVES
Evaluation of the therapeutic efficacy of splenectomy as an alternative to immunosuppressive therapy.

ANIMALS
Twenty client-owned dogs with NRIMA who had splenectomies performed at Hokkaido University Veterinary Teaching Hospital between 2015 and 2021.

METHODS
Retrospective case series.

RESULTS
The median age of the included dogs was 11.5 years (range 3–15 years). The reasons for splenectomy were:

1. No response to immunosuppressive therapy (n=13)
2. Temporary response to immunosuppressive therapy but subsequent loss of response (n=5)
3. Suspected complications of immunosuppressive therapy (n=1)
4. First-line treatment (n=1)

Nineteen dogs were treated with immunosuppressive therapy prior to splenectomy, and the median duration of treatment was 113 days (range 50–295 days). Two dogs died within 7 days of surgery, and the remaining 18 dogs showed an increase in reticulocyte count at a median of 16 days (range 1–49 days) after splenectomy, with a median maximum reticulocyte count of 137,900/μl (range 71,700–368,200/μl). During the study period, seven dogs had complete remission of anemia, eight dogs had persistent mild to moderate anemia but could be maintained without blood transfusion, and three dogs had worsening non-regenerative anemia that required therapeutic intervention.

CONCLUSIONS AND CLINICAL IMPORTANCE
Fifteen out of 20 dogs (75%) improved after splenectomy and decreased their dependency on transfusions, suggesting that splenectomy is an effective treatment for NRIMA.