

A Pilot Study to Evaluate the Efficacy of Topical Hyaluronic Acid for Feline Chronic Gingivostomatitis (FCGS)

Background

Feline Chronic Gingivostomatitis (FCGS) is a painful and progressive disease characterized by severe oral mucosal inflammation. This condition often requires full mouth extractions (FME) and ongoing medical treatment, yet many patients show limited or temporary responses, highlighting the need for new therapies.

Hyaluronic Acid (HA) – effective in treatment of analogous human oral inflammatory conditions (e.g., lichen planus, aphthous ulcers) – shows potential as a novel FCGS treatment. This potential, as well as HA's establishment as a safe and effective intervention in previous veterinary applications, are the basis of this clinical trial.

This prospective, single-arm, multi-center study assessed the efficacy and safety of HA in client-owned patients with FCGS.

Methods

Primary Objective:

To evaluate the efficacy and safety of once-daily topical hyaluronic acid in reducing clinical signs of FCGS.

Participants:

- Feline patients with FCGS
- No change in medical therapy in the last month
- No dental surgery within past three months

Intervention:

- Treatment: Once-daily topical application of 0.8% hyaluronic acid gel, sufficient to coat stomatitis lesion, for 7 days
- Clinical Assessment: SDAI scores and oral cavity photographs collected on days 1 and 7

Results

Clinical demographics:

- N=16
- Average Age: 7.5 yrs
- Female spayed: 8
- Male neutered: 8

Stomatitis characteristics:

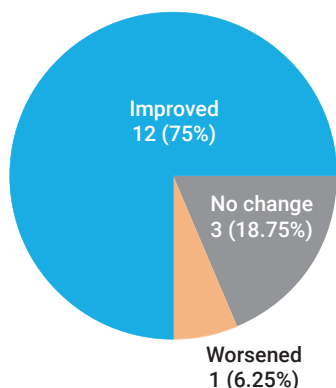
- Average duration: 22 mos
- Ulcerative: 4/16
- Ulcerative + proliferative: 12/16
- FME: 8/16

Previous interventions:

- Average prior therapies: 2.5
- Corticosteroids: 12/16
- Antibiotics: 10/16
- NSAIDs: 4/16
- Other Pain Relief: 3/16

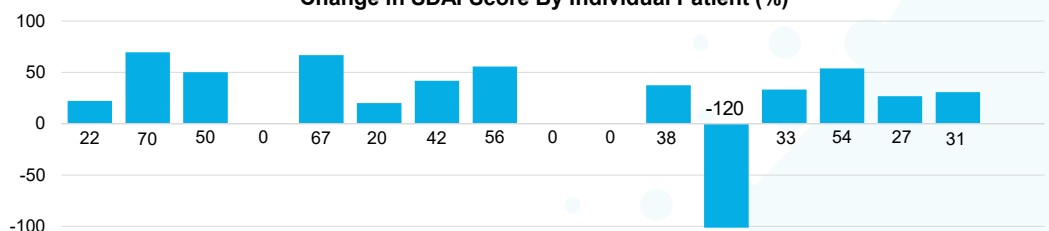
SDAI Improvement Rate

n=16; n(%)



- The average improvement in SDAI score at Day 7 vs. Day 1 (3.7 or 24%) was statistically significant via student's T test (p=0.007)
- A value of 0.77 was determined for Cohen's D effect size *
- Improvement was exhibited in 100% of FME cats, and 50% of cats without FME

Change in SDAI Score By Individual Patient (%)



* Cohen's D is a statistical measure that quantifies the difference between two group means in terms of standard deviation, providing a standardized effect size. It helps interpret the magnitude of differences, with values commonly classified as small (0.2), medium (0.5), or large (0.8).

Results, continued



Before



After



Before



After



Before



After

Client Feedback

Owners were instructed to document application ease, as well as any changes in clinical signs, behavior, or temperament.

Reports included:

- No adverse effects
- Average of 2/5 Application Difficulty (1-5, where 5 is most challenging)

Some clinicians elected to continue patients on HA beyond the study timeframe. Anecdotal evidence suggests continued improvement in SDAI score with ongoing HA application.

Conclusions

In this prospective, single-arm, multicenter trial, HA treatment showed improved SDAI scores in 75% of patients with confirmed FCGS who were refractory to an average of 2.5 prior medical therapies. Further, the trial demonstrated daily topical administration as a safe and feasible regimen for at home care.

These findings, paired with anecdotal evidence suggesting patients continue to exhibit positive results when treated beyond 7 days, highlight the promising potential of HA in treatment of FCGS. Further trials should be conducted to validate this data.

Questions? Reach out to:

Bryan Song, MD
Founder & CEO
bryan@periovine.com
+1 205-577-6645

