# Canine perianal fistula: Harnessing the power of fluorescent light energy to help improve clinical resolution



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#### INTRODUCTION

Canine perianal fistulas (CPF) are painful, chronic inflammatory sinus tracts and ulcers that develop spontaneously in the perianal skin.

CPF is a debilitating condition and is known to have a negative impact on the quality of life (QoL) of affected dogs and can result in euthanasia if not managed effectively.

Conventional medical treatment involves the use of lifelong immunomodulatory or immunosuppressive drugs; however, the successful resolution of lesions can be limited by poor owner compliance, drug-related adverse effects and dependence on costly therapies.



# **AIM OF THE STUDY**

The study aimed to evaluate the effect of Fluorescent Light Energy (FLE) in:

- Improving the extent of perianal lesions
- Reducing clinical signs of vocalization and discomfort on defecation.

### **MATERIAL AND METHODS**

A total of 4 dogs with lesions compatible with CPF were included.

#### Clinical signs included:

- Tenesmus
- Haematochezia
- Ulcerated malodorous perianal region with draining fistulous tract
- Pain, discomfort, licking and inability to sit

**FLE was applied as sole management therapy** once a week with two consecutive applications in the same session for each dog until clinical signs had significantly improved.

Dogs were assessed by measuring the size of lesions at the start of the study and then weekly for six weeks, using planimetry software. Owners recorded vocalization and straining frequency scores during their pet's defecation, and perianal licking frequency on a 0–5 point scale to assess their response to therapy.

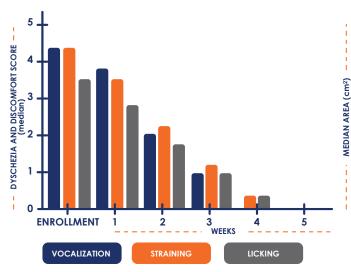


#### **RESULTS**

All dogs achieved a significant reduction in vocalization, straining and licking after two weeks (Figure 1). After five weeks of FLE therapy, the size of lesional areas had significantly decreased (P=0.04) (Figure 2). No recurrence was observed by owners within the first six months after cessation of therapy.

FIGURE 1 Median weekly scores for dyschezia (vocalization, straining) and discomfort (licking). A significant improvement was seen starting from Week 2 (P=0.002).

FIGURE 2 Size of median weekly lesional areas.





# **CONCLUSION**

In this study, the use of Fluorescent Light Energy (FLE) produced significant and long-term improvement in all aspects of their disease. All dogs demonstrated a >90% improvement in the extent of their perianal lesions through reduction in lesional area, together with a resolution of all signs of tenesmus, dyschezia and vocalization on defecation.

Studies have shown that FLE can contribute to enhance collagen production, modulate cutaneous inflammation, encourage angiogenesis in inflammatory skin conditions and support skin regeneration. Results from this small exploratory study suggest that FLE represents a convenient approach to help the management of this condition.



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