MULTIDISCIPLINARY APPROACH IN THE TREATMENT OF FELINE IDIOPATHIC CYSTITIS





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INTRODUCTION

Feline idiopathic cystitis (FIC) is currently the most 1. Create a common cause of feline lower urinary tract disease (FLUTD), also known as Pandora Syndrome. FIC can be manifested in different clinical scenarios that include combinations of stranguria, hematuria, polachuria and periuria. Because of its multiple etiologies, treatment for FIC consists in reducing the duration, severity and recurrence of the episodes of FLUTD, as well as preventing possible obstruction.

OBJECTIVE

- determine the protocol treatment of articles (both original research and idiopathic obstructive cystitis in the clinic (i.e. first intervention and maintenance of treatment), as well as by their owners (i.e. treatment after release of patient)
- 2. Describe the most effective prevention tools
- 3. Identify the current limitations in the treatment
- 4. Describe future treatments

METHODOLOGY

bibliographic review to Literature search of the research reviews) between years 2000 and 2023 published in PubMed. Further determine the impact of each article using the Clarivate platform.

PATHOPHYSIOLOGY

Etiology of FIC is varied which combines the endocrine and nervous system. It is also affected by changes in the environment and the bladder

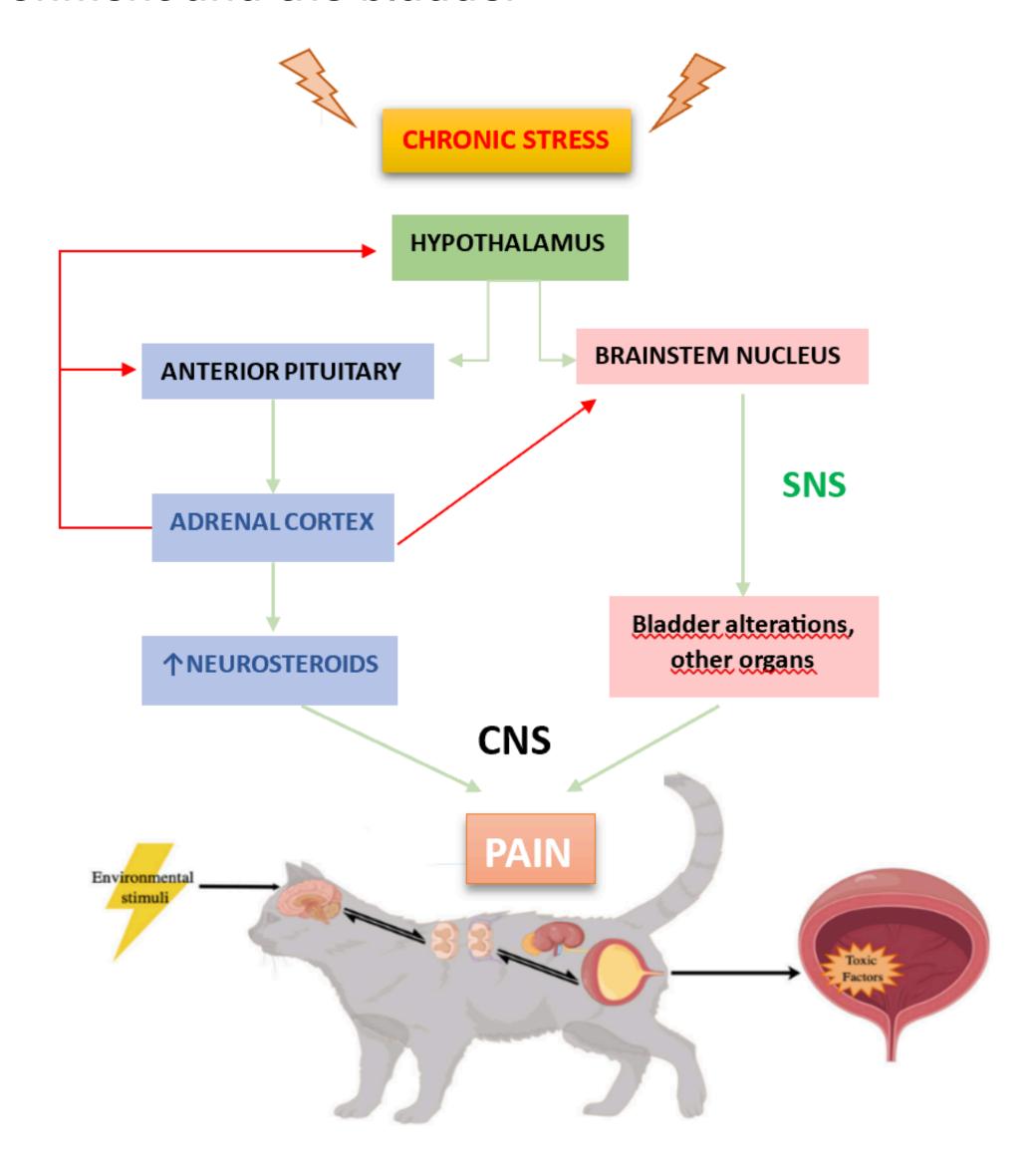


Figure 1. Image modified from He, C., Fan, K., Hao, Z., Tang, N., Li, G., & Wang, S. (2022). Prevalence, Risk Factors, Pathophysiology, Potential Biomarkers and Management of Feline Idiopathic Cystitis: An Update Review. In Frontiers in Veterinary Science (Vol. 9). Frontiers Media S.A. https://doi.org/10.3389/fvets.2022.900847

TREATMENT

ACUTE

Pharmacological treatment including antispasmotics, anticholinergic and, opioid and non-steroidal analgesic and anti-inflammatory drugs.

CHRONIC

- Benzodiazepines to diminish anxiety
- Tricyclic antidepressant
- Feline pheromones
- Exogenous forms of glycosaminoglycans (GAGs)
- Multimodal environmental modification (MEMO): follow the 5 pillars to establish a healthy environment for domestic felines
 - Provide a safe space at home as well as during transportation
 - Provide multiple resources at multiple separate places
 - Enable predatory and playful behavior
 - Provide a predictble positive, consistent interaction with humans
 - Provide an environment that respects their olfactory senses



Figure 2. QR: Link to informational brochure on environmental enrichment for owners

FUTURE PRESPECTIVES

FIC in humans presents similar characteristics to that in felines, so it is hence important to be appraised of the latest developments in this field to improve treatment. These advancements will provide knowledge of new biomarkers, monoclonal antibody treatments and, changes in diet.

CONCLUSION

- 1. There is currently no unique treatment to cure FIC. However, there are multiple strategies, including pharmacological and environmental treatments, that can help reduce its recurrence time.
- 2. The main treatment consists in providing changes in the environment that provides the 5 pillars (MEMO) that take into account the basic feline behaviors.
- 3. Pharmacological treatment is currently limited. There are few drugs that will provide efficacious treatment of this illness used to reduce pain after the first symptoms begin developing and cannot prevent damage nor future relapses.
- 4. In order to avoid potential negative response from guardians, it is important to clarify that the proposed interventions are aimed at improving the quality of life of the animal and to diminish the number of future relapses.
- 5. Recent research on idiopathic cystitis in humans has provided various biomarkers that could eventually provide early diagnosis in animals. There are multiple treatments that are currently being used in both human and veterinary medicine.