#470 Genitofemoral Neuromodulation as a Novel Pain Management Solution for Patients with Chronic Testicular Pain: A Proof of Concept Study

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INTRODUCTION

Managing severe chronic testicular pain that has failed medical therapy, physiotherapy and surgical options remains a significant therapeutic challenge. The persistence of severe discomfort in the testicular region not only compromises the quality of life for affected individuals but also presents a pressing need for innovative and alternative approaches to pain management.

This study presents a proof of concept for the use of genitofemoral neuromodulation (GFM) as a potential pain management solution for patients with persistent testicular pain. Genitofemoral neuromodulation involves the targeted modulation of the genitofemoral nerve, aiming to interrupt or modulate pain signals emanating from the genitofemoral nerve that may contribute to chronic testicular pain.

AIMS

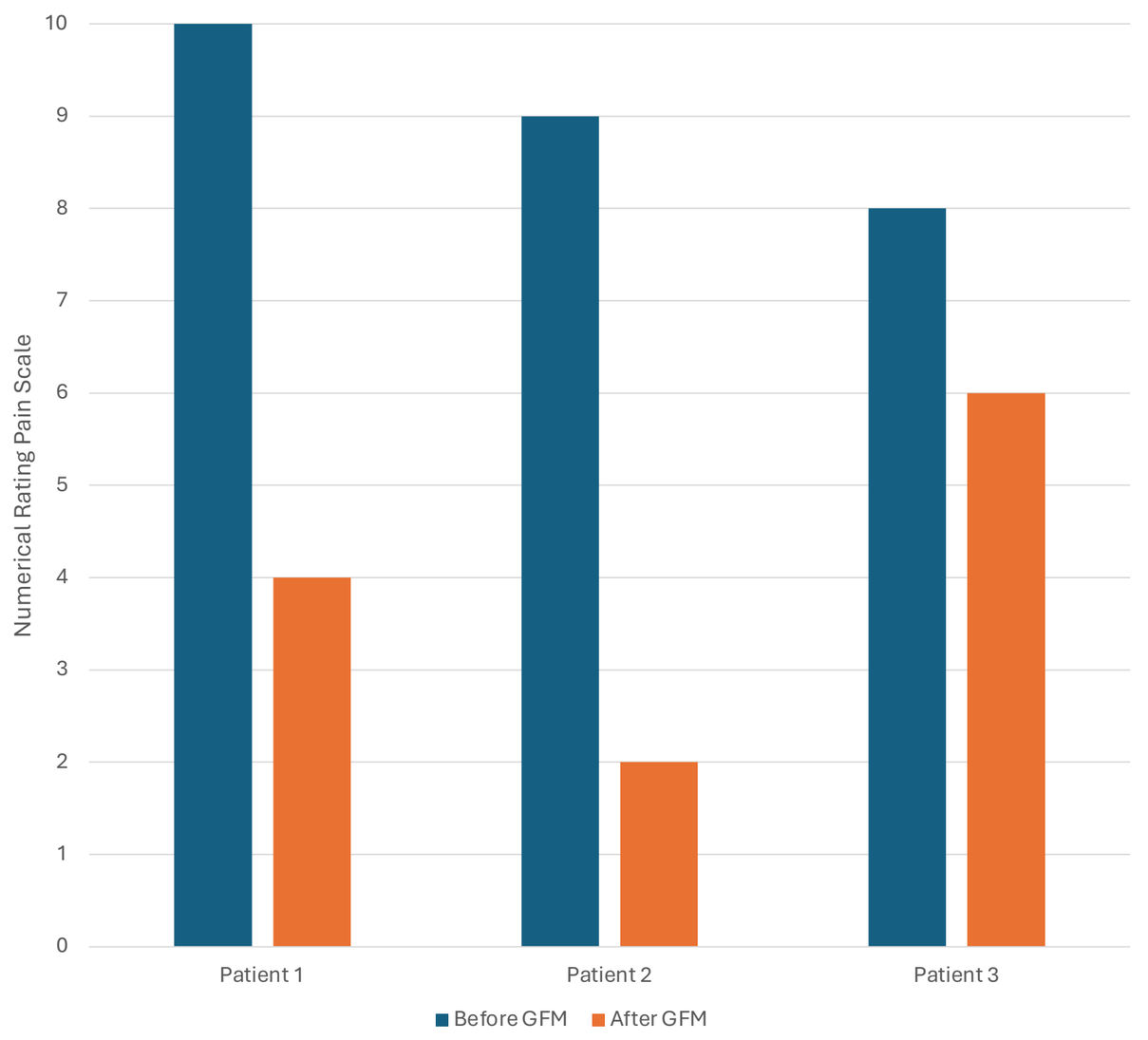
The primary objective of this study is to assess the feasibility and efficacy of GFM as a pain management strategy for patients with chronic testicular pain resistant to conservative measures and surgical intervention.

METHODS

Patients with chronic testicular pain refractory to conventional treatments were selected for GFM. All patients must have had temporary relief from pain with a spermatic cord block. A total of three patients were included in this proof-of-concept study.

Demographic information, prior medical and surgical interventions, and pre- and post-operative pain scores using the Numerical Rating Pain Scale were collected. The procedure was performed by a single experienced urologist, and detailed operative information was recorded.

Figure 1. Numerical rating pain scale before and after GFM



DISCUSSION

The proof-of-concept study indicates that GFM holds promise in managing chronic testicular pain refractory to conventional treatments. Noteworthy improvements across diverse age groups and medical histories suggest the potential efficacy of GFM in alleviating persistent discomfort. The observed reductions in pain scores underscore the promising outcomes of GFM in this specific patient cohort. However, given the study's small sample size, further research is imperative to establish the long-term efficacy and safety of GFM in a broader context.

CONCLUSION

This study suggests that GFM is effective in reducing pain scores and could be a viable option for patients with chronic testicular pain refractory to traditional interventions. Further research is essential to establish the long term efficacy and safety of GFM in this cohort.

Table 1. Baseline demographics and pain score results of three patients

Case	Age	Previous non-surgical therapy	Previous surgeries	Pain score before GFM	Pain score after GFM
1	75	Opioids, physiotherapy, radiofrequency ablation, nerve block	-	10/10	4/10
2	59	Opioids, nortriptyline, baclofen, physiotherapy	-	9/10	2/10
3	36	Opioids, physiotherapy	Bilateral orchidectomy	8/10	6/10

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