

Abstract 797: Cystoscopic Application of RADA-16 (PuraShield®) in the Management of Interstitial Cystitis.

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INTRODUCTION

Interstitial Cystitis (IC), defined by the International Continence Society as a chronic pelvic pain syndrome related to the urinary bladder, is a debilitating inflammatory condition with limited efficacious treatments.

RADA-16 (PuraShield®) is a synthetic self-assembling peptide hydrogel. Beyond its established haemostatic properties, its 3D nanostructure mimics the natural extracellular matrix, providing a scaffold that facilitates cell proliferation and tissue regeneration.

We hypothesised that RADA-16 could promote healing of the bladder mucosa in treatment-refractory IC.

METHODOLOGY

A 57-year-old female presented with chronic bladder pain and haematuria.

Her complex history included a neurogenic bladder following a spinal stroke in 2014 caused by bleeding following endometrial ablation, long-term suprapubic catheterisation requiring 8 weekly changes under a general anaesthesia (GA), and short bowel syndrome from multiple ileostomy revisions.

Symptoms persisted despite SNS, intravesical Amikacin, lidocaine, iAluril, and Uromune.

Under GA, the bladder was emptied and insufflated with CO₂. 3mls of RADA-16 were applied cystoscopically over the inflamed mucosal areas and left for five minutes before gas evacuation.

RESULTS

At the subsequent eight-week SPC exchange, repeat cystoscopy demonstrated marked macroscopic improvement in the previously inflamed areas (Figure 1). The urothelial surface appeared more intact, with a visible reduction in erythema and inflammatory changes.

Clinically, the patient reported a substantial reduction in pain and experienced no further episodes of haematuria during the follow-up period.

No procedural or post-interventional complications were observed.

CONCLUSION

Intravesical RADA-16 application appears to be a safe, minimally invasive, and promising therapeutic strategy for promoting mucosal healing in patients with refractory interstitial cystitis.

By supporting urothelial regeneration and restoring bladder barrier integrity, this novel approach may address a critical unmet need in individuals with complex bladder pathology who have failed conventional therapies.

Further large-scale, controlled studies are warranted to confirm its long-term efficacy, safety profile, and potential role within the therapeutic algorithm for refractory IC.

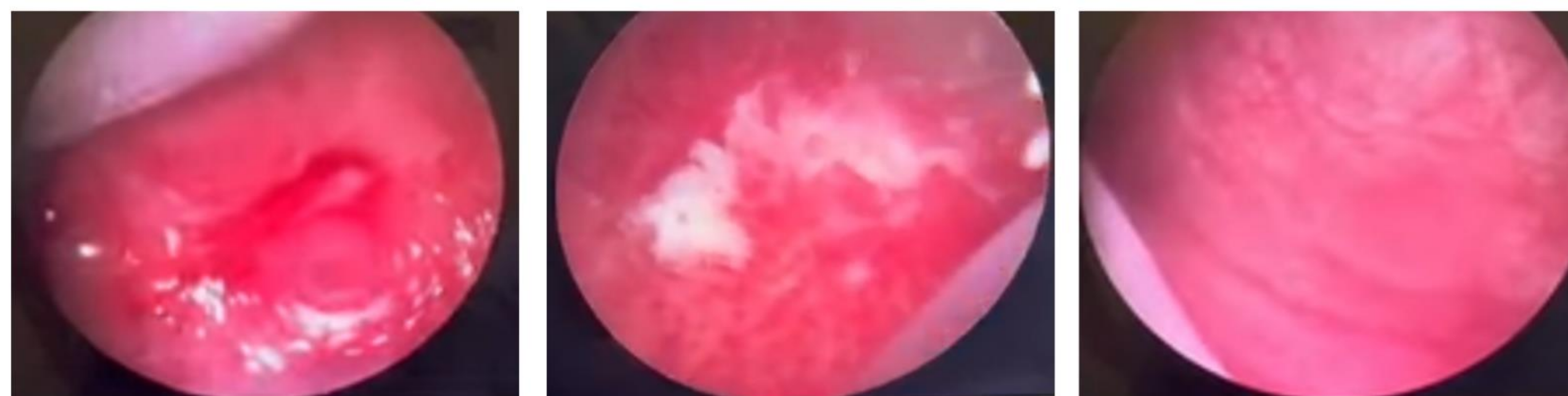
BEFORE TREATMENT



AFTER TREATMENT

Figure 1

Before PuraStat application



8 weeks after PuraStat application



DISCLOSURES: No personal conflict of interest.