

THE EFFECT OF THE COMBINATION THERAPY FOR PATIENTS WITH ULCERATIVE INTERSTITIAL CYSTITIS

Hypothesis / aims of study

Interstitial cystitis is a disabling disease of the urinary bladder and its etiology and treatment are not established yet. Treatment includes diet, behavior modification, medical treatment and surgical treatment, and non of them are sufficient. But transurethral resection or fulgulation of ulcer and hydrodistension are one of the effective treatment prodedures. To date, no prospective study about the combination therapy (transurethral resection or fulgulation of ulcer and hydrodistension) in interstitial cystitis was reported. We evaluated the effect of transurethral resection and fulgulation of ulcer and hydrodistension in ulcerative type of interstitial cystitis

Study design, materials and methods

Forty six consecutive women with ulcerative type of interstitial cystitis between January 2007 and December 2009 visited our urologic department. All patients was treated with transurethral resection or fulgulation of ulcer and hydrodistension. The diagnostic confirmation of ulcerative interstitial cystitis was made by visual inspection of ulceration during cystoscopy among with painful bladder symptoms. Diagnostic cystoscopy was performed again under regional or general anesthesia again. The average duration of disease was 6.8 years and the average follow-up was 9.8 months. We assessed the shift of the bladder pain by visual analog pain scale (VAS), the frequency of urination by 3-day voiding diary, and the change in bladder volume by identification of functional bladder capacity in 3-day voiding diary. All measurable variables including VAS, voiding diary, uroflowmetry and residual urine volume assessed at initial visit and 6 months follow up day(31 patients). We also compared the variables of influencing the outcome between two groups after Global Response Assessment (+1 of standard): group 1 (n=20) showed improvement, while group 2 (n=11) did not.

Results

Of the 46 patients, 31 (mean age, 60.3 years) who were followed up for 6 months were analyzed. The VAS improved from 7.5 to 3.9 on average ($p<0.001$), while the frequency of urination in the voiding diary did not change significantly (14.6 vs. 11.9 times, $p=0.208$). The average volume of the bladder also did not differ significantly (189.8 vs. 200.8 ml; $p=0.702$). The number of ulcers averaged 2.9 in group 2 and 1.8 in group 1 ($p=0.011$). The average bladder volume was larger in group 1 (213.8 vs. 154.3 ml; $p=0.017$). After analysis of two groups, the number of ulceration (more than two ulcers) and preoperative functional bladder volume (smaller than 150ml) affects the successful outcome in group 2. (Eight of the 12 patients (66.6%), ten of the 13 patients (76.9%)(<0.05).

Interpretation of results

The combination therapy (Transurethral resection or fulguration of ulcer with hydrodistention) reduced pain significantly, but do not alter the frequency of urination and bladder capacity in ulcerative interstitial cystitis patients. But there was 64.5% improvement in the GRA(+1 of standard). The number of ulcers, and the preoperative functional bladder capacity were forced to be important influencing factors for treatment outcome.

Concluding message

Transurethral resection or fulguration of ulcer with hydrodistention in patient with ulcerative interstitial cystitis is one of the important treatment procedures. Even though there are several large scaled retrospective study reported about its efficacy, large scaled prospective study with long term duration needs for establishment of the efficacy.

Ref) Peeker R, Aldenborg F, Fall M. Urogynecol J Pelvic Floor Dysfunct. 2000;11(5):290-5.

References

1. Peeker R, Aldenborg F, Fall M. Urogynecol J Pelvic Floor Dysfunct. 2000;11(5):290-5.

Specify source of funding or grant	No
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	accepted clinical treatment only
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes