

INTRAVESICAL HYALURONIC ACID FOR THE TREATMENT OF INTERSTITIAL CYSTITIS: AN UPDATE

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INTRODUCTION & OBJECTIVES: Current pathogenetic concepts of interstitial cystitis (IC) are based on an increased urothelial permeability due to dysfunction of the GAG (glycosaminoglycane)-layer and the urothelium. The efficacy of GAG-substitution therapy has been demonstrated with various drugs. Instillation of hyaluronic acid, a GAG-component, for IC therapy was introduced by Morales (J.Urol., 156: 45-48, 1996.) who found a 71% rate of symptom improvement. For the present study, we analyzed the outcome of intravesical hyaluronic acid therapy in IC patients treated at our institutions.

MATERIAL & METHODS: We retrospectively evaluated 95 IC patients by a questionnaire mailed several months after the last instillation. Patients had been assigned for hyaluronic acid therapy in case of increased potassium sensitivity demonstrated by the modified potassium sensitivity test (Daha et al., J.Urol., 170: 807, 2003). Weekly instillations of 50 cc hyaluronic acid 40 mg were performed until patients were free of symptoms or significantly improved to their satisfaction. Patients rated their pre- and posttreatment as well as their present symptoms on a visual analog scale (VAS, 0-10) and were asked to comment on their personal benefit on quality of life.

RESULTS: The average symptom score was 8.28 pretreatment, 3.51 posttreatment and 3.31 at the time of survey (mean follow-up time 7 months). Mean maximal bladder capacity with 0.9 % NaCl was 325cc (28-700) vs. 200cc (18-500) with 0.2M KCl (mean reduction 39%). 80/95 (84.2 %) of patients reported an improvement of ≥ 2 on the VAS after instillation therapy and 83/95 (87.3 %) at follow-up. The average improvement was 5.68 on VAS at the end of instillation therapy and 5.67 at the time of survey for patients responding to hyaluronic acid. An average of 11.4 instillations was performed to achieve this improvement rate. 31/95 patients (33%) needed an additional instillation course to maintain the therapeutic benefit. 78/95 patients(82%) confirmed that the present concept had improved their quality of life significantly and that they would undergo instillation therapy with hyaluronic acid again.

CONCLUSIONS: The present results confirm Morales's preliminary report on the efficacy of intravesical hyaluronic acid therapy in IC and suggest that results are even better if patients are screened by the modified potassium sensitivity test. Potassium sensitive patients have a > 80% chance of significant symptom remission with hyaluronic acid instillations that is maintained over months.