

INTRAVESICAL INSTILLATION OF SODIUM HYALURONATE AFTER ACUTE CYSTITIS FOR PREVENTION OF RECURRENT UTIS

Hypothesis / aims of study

Acute cystitis is most common "female" disease in urology. More than 1 500 000 cases of acute bacterial cystitis registered in Russia every year. Usually, acute uncomplicated UTIs is easy to treat. However, 20 – 40% of patients have recurrent UTIs during year after first case of cystitis. Some studies showed that impairment of glycosaminoglycan layer lead to recurrent urogenital tract infection.

Hyaluronic acid along with chondroitine sulphate and geparan sulphate is important component of protective barrier of the urothelium. We suggested that recovery of GAG-layer may prevent recurrence of bacterial cystitis after first attack of acute cystitis..

Study design, materials and methods

180 female patients participated in the study. They have been equally (randomized) divided into two groups.

Patients in 1st group were taking standard treatment of acute cystitis (fluoroquinolones, antimuscharinic, anti-inflammatory drugs).

Patients in second group were taking the same treatment and starting from 10th day after curing they've taken four instillations the 40 mg of sodium hyaluronate (one instillation weekly).

During one-year follow-up period we were evaluating: number of patients who were suffering from recurrent UTIs (at least three cases per year), duration of case and intensity of case (Visual Analog Scale).

7 patients of 1st group and 9 patients of 2nd group have dropped out of study for various reasons.

Results

	Number of pts with UTIs	Duration of case (days)	Intensity
1 st group (control) 83 pts	16 pts (19,28%)	5,4 ± 1,3	6,1 + 1,4
2 nd group (sodium hyaluronate) 81 pts	5 pts (6,17%)	1,9 ± 0,8	3,0 + 0,8
	p < 0,05	p < 0,05	p < 0,05

Interpretation of results

There was significant difference between two groups of patients. Intravesical administration of sodium hyaluronate for recovery of protective barrier of urothelium after acute cystitis lead to prevent recurrent UTIs, decrease of duration and intensity of cystitis cases.

Concluding message

We need double-blind multicenter RCT for confirmation of efficiency of this method.

Anyway, this method is showing great promise for prevention of recurrent UTIs

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	Yes
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Local Ethics Committee of Kuban State Medical University
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes