AUA Abstract Submission # is 14-2375.

Trans-rectal Injections of Antibiotics for the Treatment of Chronic Prostatitis.

Attila Toth, (*) M.D., Federico Guercini, M.D., Dawn M. Feldthouse, RN. and Jun C. Zhang. New York-Presbyterian Hospital, Department of OBGYN, New York, N.Y.

Introduction and Objectives:

Chronic prostatitis can have devastating financial, social, psychological, sexual and reproductive consequences. Current research shows that oral antibiotic therapies fail to reach therapeutic concentrations within the damaged prostate, and thus often fail to eradicate pathogens. In response, our practice adopted treating chronic bacterial prostatitis with direct injections, allowing for penetration of concentrated antibiotics into scarred, calcified areas with sealed off bacteria. We compared pre- and post-injection NIH prostatitis symptom scores (NIHPSS) in 77 males to evaluate the merit of injection therapy in lowering NIHPSS.

Methods:

This retrospective study involved 77 males with a presenting diagnosis of chronic prostatitis. Initial testing included digital rectal examination, expressed prostatic secretions, urinalysis and rectal ultrasound. Genital secretions were tested for Chlamydia using direct fluorescent antibody technique. Additional testing for *Mycoplasma*, aerobic and anaerobic bacteria, yeast and *Trichomonas* were performed. A Siemens G40-Sonoline with an EC9-4 standard endocavitary probe and a 22 gauge, seven-inch long spinal needle was used to inject 10 milliliters of the cocktail containing 6 different antibiotics and methylprednisolone. Oral analgesics were given prior to the procedure.

Results:

Irrespective of the duration of prostatitis, age at first visit, *Chlamydia* status, and the time until follow-up all NIHPSS decreased significantly from pre- to post-injection therapy.

Conclusions:

Direct injection of an antibiotic and steroid cocktail for chronic prostatitis is a viable addition to standard therapies. Improvements in symptom scores are long lasting. These findings support the need for a prospective, double blind, controlled study.

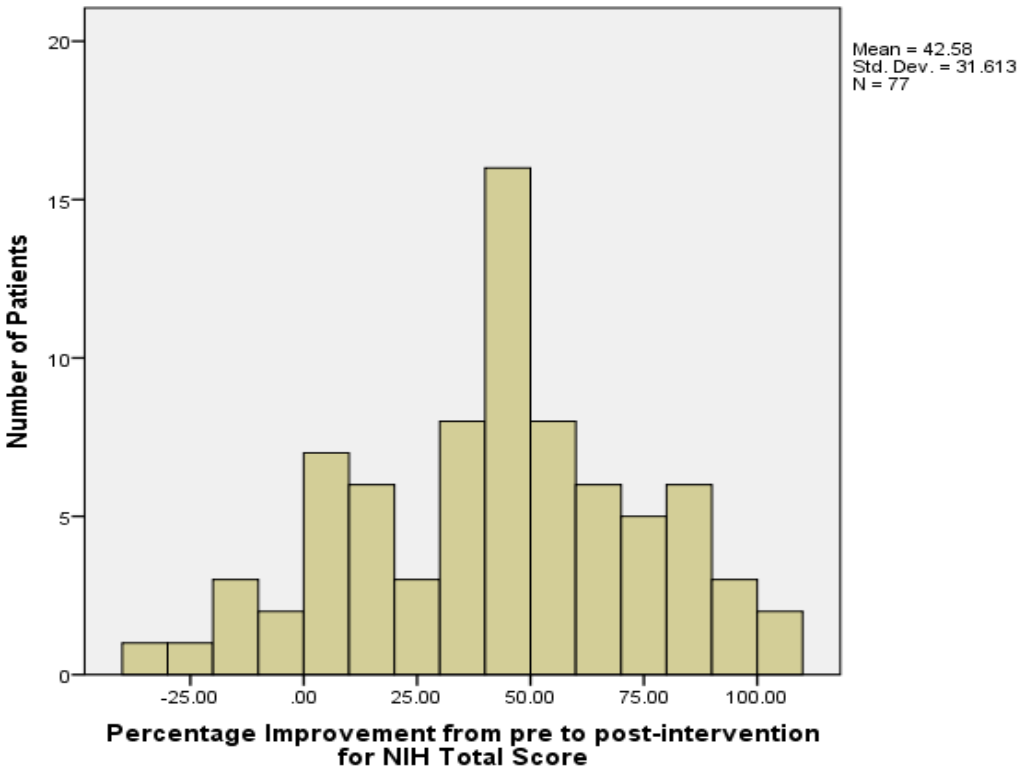

Figure 1.

Paired t-test analyses pre- and post-therapy differences in NIH symptom scores

Pair	N	Mean difference	SE Mean Difference	*t*	*p*	η^2
NIH Pain	77	5.63	.585	9.627	< 0.0005	0.379
NIH Urinary	77	2.56	.312	8.191	< 0.0005	0.306
NIH Quality of life	77	7.05	.352	20.024	< 0.0005	0.725
NIH Total Score	77	12.26	1.086	11.293	< 0.0005	0.456

Note. *N* = Sample Size; *SE* = Standard Error.

Table 1.

Bacteriology Studies on 77 (n) Patients Treated with Direct Injection Therapy

Table 2.

	# Tested	# Not tested	# Positive	# Negative
Chlamydia	70 90% of n	7 10% of n	56 80% of those tested (72% of n)	14 20% of those tested (18% of n)
Mycoplasma	60 77% of n	17 23% of n	4 7% of those tested (5% of n)	56 93% of those tested (72% of n)
Aerobes	61 78% of n	16 22% of n	40 66% of those tested (51% of n)	21 34% of those tested (27% of n)
Anaerobes	61 78% of n	16 22% of n	52 85% of those tested (67% of n)	9 15% of those tested (12% of n)