UPON THE ETIOLOGICAL TREATMENT OF BACTERIAL NONGONOCOCCAL URETHRITIS

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The real distribution of the nongonococcal urethritis (NGU) is still not analyzed statistically. It is quite obvious that they multiply constantly and acquire the features of venereal pathology (2, 5, 7, 8, 9, 10, 17). The polyetiological beginning as well as their chronic course cause certain therapeutical problems which arouse, any way, psycho-functional disorders for the patients.

Assuming the hypothesis for the resistance of the bacterial agent and the altered local ground as well as the reactivity of the urethral mucosa being an important reason for the therapeutical difficulties, we intent to apply corticosteroids along with the appropriate etiological treatment.

Material and methods

The study covers 69 male patients, aged 20—50 years (about 75% include the age between 20—30 years). All patients were thoroughly investigated before the treatment — urologically, microscopically, bacteriologically, virologically and serologically. The sensitivity of the isolated bacterial strains towards the most commonly used antibiotics was determined by using the diffusion method.

Two models of treatment were applied:

I — The patients were treated on the base of the bacteriological investigations and the established (in vitro) antibiotic-sensitivity of the bacterial strains isolated from 28 patients of this group. The mean prolongation (duration) of the treatment was 7 days.

II — By using the first model we simultaneously apply corticosteroid (Prednisolon F) to the treatment of 15 patients. The initial dose of administration was 3 mg daily with a 3-days-period gradual decrease of the dose. The mean duration of the treatment was 10 days. The therapeutical results were studied until the 30th day after the treatment. Therapeutical effect over 20 patients was not established as a result of some side-effects and deviations from the standard treatment.

Results and discussion

On the grounds of the carried investigations we can make some conclusions concerning the etiology of NGU of the studied patients (table 1):

Various bacterial strains were isolated from 36 patients of all 69 (52.2%). The rest 33 patients (47.8%) showed a mixed infection: 25 of them (36.2%) with Trychomonas vaginalis and bacteria, 6 of them (8.7%) with viruses and bacteria, and 2 of them (2.9%) with mycoplasmas and bacteria.

T. vaginalis is considered as one of the most common reasons for NGU. According to some authors (1, 7, 17) 8.8—50% of all inflammatory diseases of the urethral mucosa of male patients are a result of trychomonas. Other authors (12, 16, 20) discuss the etiological role of mycoplasma for NGU. Mav

Table 1

Etiology of Nongonococcal Urethritis

Etiological types	Patients	%
Bacterial	36	52.2
Mixed: a) trichomonas vaginalis and bacteria	25	36.2
b) viruses and bacteria	6	8.7
c) mycoplasmas and bacteria	2	2.9
Total	69	100

rov P. P. et al. (10) establishes mycoplasma in 13.4% of healthy people and 23% of patients with postgonococcial urethritis (L-forms). Jänsch H. et al. (16) considers mycoplasma T-strains as a reason for NGU in 37% of their investigations. The authors recommend that every patient is obligatory studied for mycoplasma.

The sensitivity of the isolated strains towards the most commonly used antibiotics (in vitro), on the base of an ordinary assay, is shown on table 2. Gentamycin was most often applied — 15 patients, followed by kanamycin — 8 patients, tetraolean — 4 patients, etc.

Table 2

Sensitivity of Bacterial Species, Isolated from NGU Patients, Relative to Antibiotics — Rating Assay

No	Bacterial species	No of patients	Penicillin	Streptomycin	Methicillin	Erythran	Chlormitromycin	Resistomycin	Oleandomycin	Tetracyclin	Abricyclin	Vulcamycin	Tetraolean	Ampicillin	Gentamycin
1	Staph. epidermidis	16	1.4	1.2	2.1	1.1	0.8	1.9	1.1	0.7	—	1.6	0.9	1.3	1.6
2	Staph. albus	9	1.2	1.5	0.9	0.9	1	0.9	0.4	0.9	—	0.3	0.9	1.3	2
3	E. coli	9	0.2	0.8	0.9	0.4	0.9	1.4	0.4	0.1	—	0.1	0.2	0.3	1.4
4	St. albus n. haem.	8	1.5	1.7	2.6	0.8	1	1.5	0.7	0.7	0.2	1.7	1	1.5	1.7
5	Enterococcus	8	0.6	0.6	0.8	1.0	1.5	1.0	1.0	1.0	—	1 0	0.8	2	1.2
6	Strept. pyogenicus	6	1.5	0.5	1.1	1.1	1.3	0.8	0.9	0.8	—	1.1	0.6	1.6	1.6
7	Staph. aureus	5	0.4	0.8	1.2	0.2	1.2	0.6	0.6	04	—	1.2	1	1.8	1.6
8	Staph. albus β-haem.	4	0.5	1.0	2.0	1.0	0.7	1.2	1.0	0.7	—	2	1.2	1.2	2
9	Micr. albicans	3	0.3	2	2.6	1.6	1	2	2	1	—	2.6	1.3	2	3
10	B. proteus	1	1	1	—	—	1	1	—	—	—	—	—	2	2

The results of the etiological treatment of 28 patients by using the first therapeutical model (antibiotic or antibiotic simultaneously with trychomonacid according to the case) were the following: cured — 12 patients (80%), with clinical improvement — 3 patients (20%). The results of the first therapeutical model were similar to those of other authors (4, 14).

According to Carrol B. et al. (12) the etiological treatment requires a therapeutical effect in 33.3% of all patients under treatment. Lopatin A. I. (9) reports the highest percent (80%) of cured patients using neurigramon.

In conclusion: the results of the treatment by using both models show the necessity of a preliminary bacteriological stydy of the patients with NGU. Besides, along with the etiological treatment of these patients, the application (administration) of corticosteroids considerably improves the therapeutical effect. The expedience of this model of treatment will be an object of future investigations.

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ОБ ЭТИОЛОГИЧЕСКОМ ЛЕЧЕНИИ БАКТЕРИАЛЬНЫХ НЕГОНОКОККОВЫХ УРЕТРИТОВ

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РЕЗЮМЕ

Авторский коллектив поставил перед собой задачу подвергнуть анализу причины и благоприятствующие моменты для появления негонококковых уретритов и возможности для их эффективного этиологического лечения. Для этой цели больные были анкетированы и предварительно исследованы — от каждого был сделан посев и антибиограмма, на основании которой проводилось лечение. Наряду с этим были проведены исследования на микоплазматическую, трихомонадную, вирусную и микоплазматическую инфекцию. На основе обширного материала анализированы изолированные бактериальные штаммы и их чувствительность к применяемым в практике антибиотикам. Лечение больных было проведено по двум схемам, в соответствии с устойчивостью изолированного бактериального штамма, без и с включением глюкокортикостероидов.