# CLINICAL TRIAL OF THE PREPARATION Conprosta® in Therapy of Benign Prostate Hyperplasia (BPH) and Chronic Prostatitis (HP)





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Clinical Trial of the Preparation Conprosta

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# Introduction

Increased incidence of prostate gland diseases, among which the most commonly being chronic prostatitis (HP) and benign prostate hyperplasia (BPH), gave rise to the emergence of a large number of dietetic supplements in the market in the past decade.

One of the first preparations from this group was Conprosta®.

A significant number of satisfied patients obliged the representative of this preparation for Europe, as well as the author, to clinically test the efficiency, including side effects of **Conprosta**® in the therapy of HP and BPH both as a monotherapy and within a combined therapy through a multicentric study.

**Conprosta**® tablets are obtained from the pollen of a specific oil seed rape (brassica napi), applying a modern technology developed by Conba Zhejiang Company in cooperation with the Pharmaceutical Institute Zhejiang of the Medical Academy and it launched their production in 1985. In 1998, Conprosta got FDA certificate and started being also used in the US market. This completely natural preparation is used by millions of patients in all parts of the world, and it has been in our market since 2002.

**Conprosta**<sup>®</sup> tablets are a standardized phitopreparation the main ingredient of which is pollen of a specific species of oil seed rape with all pharmacologically active ingredients of pollen. Pollen contains vitamins from groups B, A, C, and E, minerals: Fe, Zn, Ni, Se, Mg, etc., and essential amino acids, precursors of prostaglandin, phytosteroles, and unsaturated fatty acids.

#### Pharmacological effects of pollen:

In case of BPH – It prevents hyperplasia of gland epithelium, reduces the level of gland epithelium, and reduces DNA and serum acid phosphatase;

It improves contractility of urinary bladder, blocks alpha receptors in prostate and urethra;

It has an anti-inflammatory effect (inhibits exudation of protein, increases the level of leucocytes);

It inhibits hemolysis of erythrocytes and prevents aggregation of thrombocytes, and

It has an inhibitory effect on the growth of cells *in vitro*, particularly on the primary culture of epithelium and fibroblast.

*Indications for administration of Conprosta:* BPH

Chronic non-bacterial prostatitis



Prostatodynia.

#### Effect:

Inhibition of congestion in case of BPH Reduction of prostate volume Reduction of residual urine volume Mitigation of symptoms of prostatism (obstructions and irritations on urination)

#### Anti-inflammatory effect:

Mitigation of symptoms of premature and painful ejaculation, reduced libido, and weakened erection.

Pollen of oil seed rape (pollen of brassica napi) – the main ingredient of Conprosta also has other curative properties:

Antidepressive

Regulates the level of cholesterol (by increasing the level of HDL – cholesterol).

Clinical trial:

# *Clinical trial was conducted under the auspices of ITS, the exclusive representative of the Company Zhejiang Conba Pharmaceutical Co., Ltd, China – the manufacturer of Conprosta.*

The multidisciplinary polycentric study was conducted in 5 clinical centers: the Clinical Center of Serbia, Belgrade, the Clinical Hospital Center (CHC) 'Dr Dragiša Mišović' (Belgrade), the CHC Kragujevac, the CHC Niš, and the Healthcare Center (HC) Vrbas. There were 6 doctors, specialists in urology, engaged in the study: dr Borivoj Milković, dr Dragan Paunović, dr Radmila Varjačić, dr Nina Medojević, and dr Dragan Rokvić. The project manager: spec. in urology from the Urology Clinic of the CCS, of the School of Medicine in Belgrade, Prof. Dr Zoran Džamić.

The preparation was tested on 76 patients, from 31 to 83 years of age, **te** daily for the first 3 months, and 2x2 tablets during other 9 months. The study was conducted up to the end with 64 patients. Patients had regular checkups every 3 months. Prior to the beginning of the trial, case history was taken from every patient, as well as TT and TM. At the beginning and at the end of the study, for all patients, complete biochemical analyses of blood



and urine, urine culture, bacteriological swab test, and sperm culture as well as ultrasound examination (US) with rectal touche (RT) were done. At checkups every three months, biochemical blood analyses and tests of urine, urine culture, US, and RT were done. The following was tested and monitored: PSA, prostate volume, residual volume, IPSS score, and quality of life. Testing was conducted in the period of 2011/2012.

After one year and checkups of patients in 3, 6 and 12 month intervals, all the results were statistically processed.

# STATISTICAL METHODOLOGY

The following statistical methods were applied in the work for processing and analysis of data:

- Distribution of frequencies of variables covered by the study and analysis,
- Direct analysis of tabular data and analysis based on graphs and relative numbers.

Indicators of relationships - statistical description

- Measure of variability of a statistical series,
- Average value and standard deviation
- Coefficient of variation, median and Z test.

Univariate and multivariant statistical methods - for testing of significance of difference in signs when qualitative variables are in question, as well as quantitative variables, were tested univariate methods:

- χ<sup>2</sup> test for non-parametric signs
- ÂNOVA single-factor analysis of variance univariate analysis of testing of influence of selected predictor on a dependent variable,

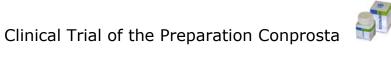
• Univariate analysis of testing of influence of a number of selected predictors on a dependent variable, ANCOVA.

- Linear trend and regression curve monitoring of trends of parameters through checkups, Total and Free/Total PSA.
- ROC curve indictors of specificity and sensitivity of parameters through checkups, Free/Total PSA and IPSS score in relation to response to therapy.
- Kaplan-Meier curve analysis of probability of monitoring of patients in relation to the type of therapy and response.



Statistical significance was defined on the level of probability of null hypothesis from  $p \le 0.05$  to p < 0.0001.

Statistical processing and analysis were made in SPSS ver.12.0, and graphical and tabular presentations were done in MICROSOFT OFFICE, i.e. in EXCEL and in WORD.





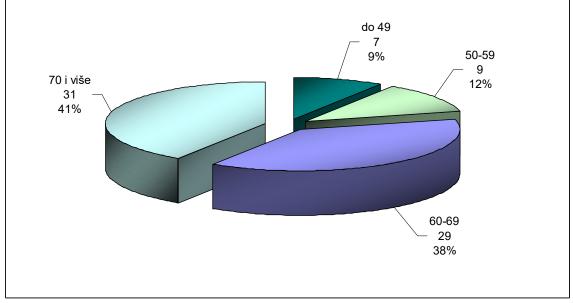
# CLINICAL TRIAL OF PREPARATION CONPROSTA

In four clinical centers and one healthcare center in Serbia (the CC of Serbia, CHC Dragiša Mišović, CC Niš, HC Vrbas, and the CHC Kragujevac), the preparation was tested on 76 patients. The study lasted for 12 months and, in the course of that period, three checkups were done, the first one after three months, the second one after 6 months, and the last checkup after 12 months.

Patients included in the study were from 31 to 83 years of age, and average age of those covered by the study was 65.96±10.2. Patients were divided into age groups, and distribution of patients according to age groups is shown in the table and graph below.

	Number	Share (%)
Up to 49	7	9.2%
50-59	9	11.8%
60-69	29	38.2%
70 and		
over	31	40.8%
Total	76	100.0%

Distribution of patients according to age groups



#### Distribution of patients according to age groups

There were statistically significantly more patients at an age of over 60, (79% of those treated), by  $\chi 2=25.68$ , p<0.001.

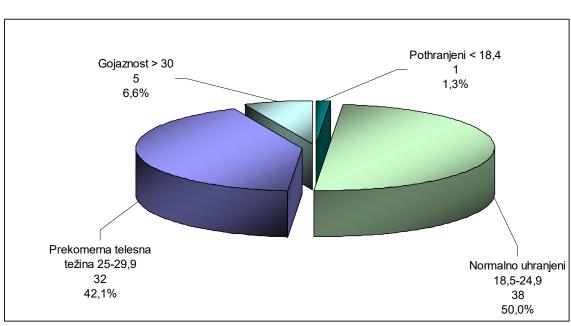
#### BODY MASS INDEX - BMI

The lowest BMI was 18.37, and the highest BMI was 32.24, while average BMI in 76 patients was  $25.43\pm2.94$ .

Patients were divided into groups according to weight level, and distribution according to BMI groups is shown in the table and graph below.

Distribution of patients according to BMI groups

	Number	Share (%)
Underweight < 18.4	1	1.3%
Normal weight 18.5-24.9	38	50.0%
Overweight 25-29.9	32	42.1%
Obesity > 30	5	6.6%
Total	76	100.0%



Distribution of patients according to BMI groups



There were statistically significantly more normal-weight patients (50% of those treated), than overweight patients (42.1%), by  $\chi 2=55.26$ , p<0.001. There were significantly less patients who were in the group of those underweight (1.3%), as well as in the group of those obese (6.6%).

#### IPSS SCORE, QUALITY OF LIFE, AND SEVERITY OF SYMPTOMS

At the beginning of the study, as well as at control measurements, patients filled in a standardized questionnaire (International Prostate Symptom Score – IPSS). Average IPSS symptom score, before the beginning of treatment, had ranged from 3 to 30 and, on an average it had been 16.28±5.8.

Distribution of patients according to average IPSS and assessment of quality of life

	Number	Average	SD	Minimum	Maximu	]
		/			m	
		Median				
IPSS	76	16.28	5.89	3.00	30.00	
Quality of life	76	3		1	6	

IPSS score, according to severity of symptoms, was classified in three groups, i.e. in the group of patients with mild, moderate or severe symptoms.

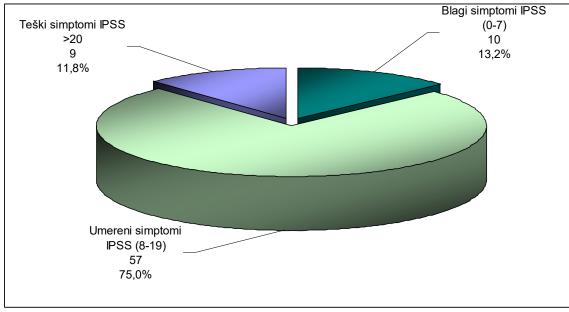
Distribution of patients according to severity of symptoms (IPSS)

	Number	Share (%)
Mild symptoms IPSS (0-7)	10	13.2%
Moderate symptoms IPSS		
(8-19)	57	75.0%
Severe symptoms IPSS >20	9	11.8%
Total	76	100.0%

IPSS score of 0-7, or the group of patients with mild symptoms, accounted for 10 (13.2%) patients, the group with moderate symptoms, or IPSS from



8-19, accounted for 57 (75%) patients, and the group with severe symptoms, or IPSS of 20 and over, accounted for 9 (11.8%) patients.



Distribution of patients according to severity of symptoms (IPSS)

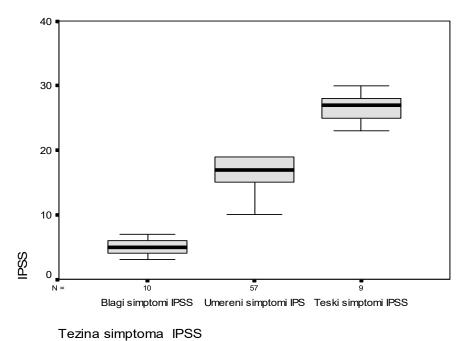
There was statistically significantly the biggest number of patients with moderate symptoms (75% of those treated), by  $\chi 2=59.39 \text{ p}<0.0001$ .

Average IPSS symptom score, prior to the beginning of treatment, on an average had been  $5.1\pm1.3$  in patients with mild symptoms. Average IPSS symptom score in patients with moderate symptoms had been  $16.63\pm2.48$  and, in patients with severe symptoms, IPSS had been  $26.44\pm2.56$ .

IPSS	Ν	Average	SD	95% CI		Min.	Max.	]
		value		Lower	Upper			
Mild symptoms, IPSS (0- 7)	10	5.10	1.37	4.12	6.08	3	7	
Moderate symptoms, IPSS (8-19)	57	16.63	2.48	15.97	17.29	10	19	
Severe symptoms, IPSS >20	9	26.44	2.56	24.48	28.41	23	30	
Total	76	16.28	5.89	14.93	17.62	3	30	

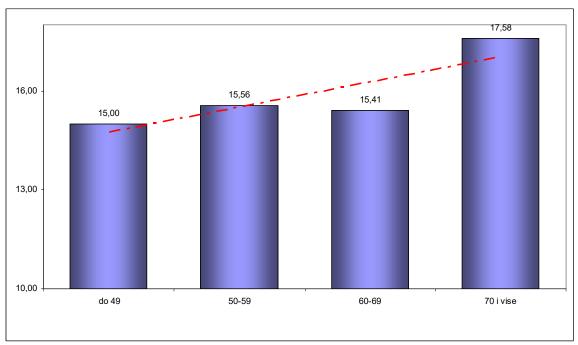
Average IPSS in	relation	to severity	of symptoms
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Average IPSS in relation to severity of symptoms

IPSS score statistically significantly differs in patients in relation to severity of symptoms, ANOVA, p < 0.0001.



Distribution of patients according to average IPSS and age groups

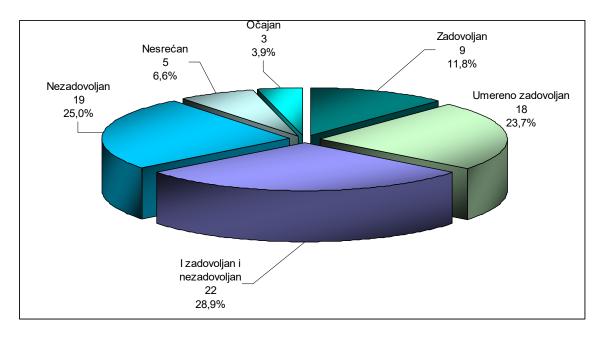


Average IPSS symptom score grew with age groups of patients; it was the lowest in patients at an age up to 49, and the highest in patients at an age of over 70.

Patients assessed the quality of life, at the beginning of the study, with marks from 1 to 6. Median of quality of life in 76 patients, at the beginning of the study, was 3, i.e. the quality of life was assessed with mark "Both satisfied and dissatisfied".

Distribution of patients according	to assessment of quality of life
------------------------------------	----------------------------------

Quality of life	Number	Share (%)	
Satisfied (1)	9	11.8	
Moderately satisfied (2)	18	23.7	
Both satisfied and dissatisfied (3)	22	28.9	
Dissatisfied (4)	19	25.0	
Miserable (5)	5	6.6	
Desperate (6)	3	3.9	
Total	76	100.0	



Distribution of patients according to assessment of quality of life



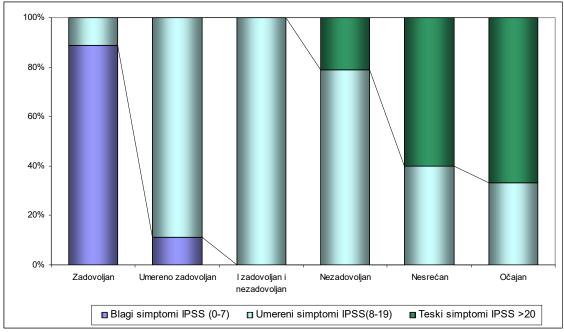
There were statistically significantly more patients with the assessment of the quality of life - both satisfied and dissatisfied - (28.9% of those treated), then with the assessment of the quality of life – dissatisfied - (25%), as well as with the assessment of the quality of life - moderately satisfied - (23.7%), by  $\chi 2=38.69$ , p<0.001, while there was significantly less satisfied (11.8%) patients at the beginning of treatment.

At the beginning of the study, assessment of the quality of life of patients was in statistically highly significant correlation with severity of symptoms, p<0.001.

	Severity of			
Quality of life	Mild symptoms IPSS (0-7)	Moderat e sympto ms IPSS (8-19)	Severe sympto ms IPSS >20	Total
Satisfied (1)	8	1	0	9
Moderately satisfied (2)	2	16	0	18
Both satisfied and dissatisfied (3)	0	22	0	22
Dissatisfied (4)	0	15	4	19
Miserable (5)	0	2	3	5
Desperate (6)	0	1	2	3
Total	10	57	9	76

Distribution of patients according to assessment of quality of life and severity of symptoms





Distribution of patients according to assessment of quality of life and severity of symptoms

Statistically significant difference in assessment of quality of life in relation to severity of symptoms was verified, there were mostly patients with mark 3 (both satisfied and dissatisfied), patients with mark 4 (dissatisfied), who at the same time had moderate symptoms.

There were statistically significantly more dissatisfied, and then miserable and desperate patients who, at the same time, had severe symptoms, by  $\chi^2$ =79.049, p<0.0001, while, in satisfied patients, symptoms were most often mild.

#### CASE HISTORY, HEREDITY, TYPE, AND FREQUENCY OF SYMPTOMS

At the beginning of the study, patients were taken their case histories, which covered difficulties, heredity and, at the same time, the number of difficulties, or symptoms, as well as previous diagnosis and therapy were monitored.

Patients most often complained about dysuric difficulties (28.9%) and chronic (38.2%) diseases.



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Weakened libido as the only symptom had 6.6% of those treated, and a combination of dysuric difficulties and chronic diseases had 2.6% of those treated.

A combination of dysuric difficulties and weakened libido had 7.9 % of those treated, and there was the same number of patients with chronic diseases and weakened libido.

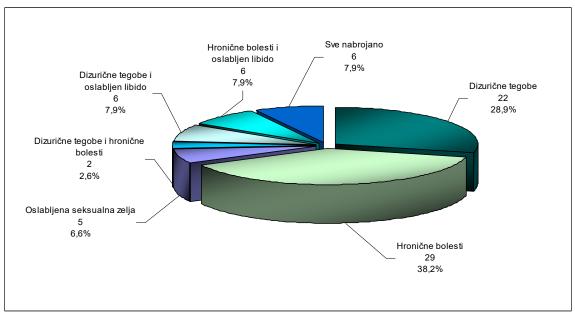
All of the above had 7.8% of patients.

	Numb er	Share (%)
Dysuric difficulties	22	28.9%
Chronic diseases*	29	38.2%
Weakened libido	5	6.6%
Dysuric difficulties, chronic disease*	2	2.6%
Dysuric difficulties, weakened libido	6	7.9%
Chronic disease*, weakened libido	6	7.9%
All difficulties, chronic disease*	6	7.9%
Total	76	100.0%

#### Distribution of patients according to case history

\*Chronic diseases that patients covered by the study had had when their case history had been taken, had been cardiovascular diseases, CVI, hypertension, diseases of blood vessels, diabetes mellitus, and sterility.





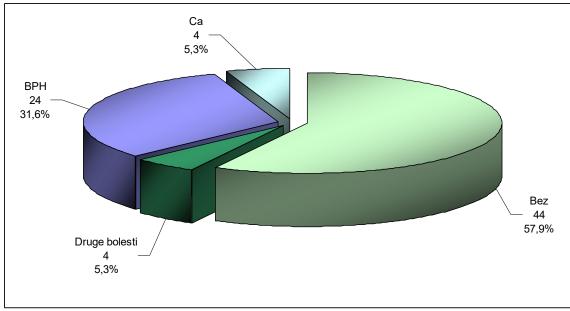
Distribution of patients according to case history

There was statistically significantly the biggest number of patients with dysuric difficulties and with a combination of dysuric difficulties and chronic diseases (over 70% of those treated), by  $\chi 2=58.66 \text{ p}<0.0001$ .

Positive heredity in patients had 32 patients, out of that number, 24 (31.6%) had BPH in family history, and 4 (5.3%) treated had in the family a diseased of Ca, while 4 (5.3%) patients had other diseases (CVI, KVO) in their respective families.

	Number	Share (%)
Without positive		
heredity	44	57.9%
BPH	24	31.6%
Са	4	5.3%
CVI, KVO, HTA	4	5.3%
Total	76	100.0%

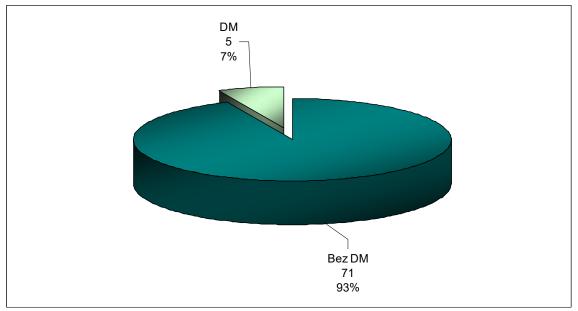
Distribution of patients according to heredity



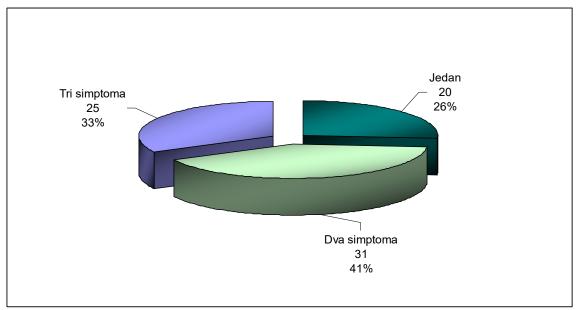
Distribution of patients according to heredity

There were statistically significantly more patients without heredity (57.9% of those treated), by  $\chi 2=57.89$ , p<0.0001 and, in 37 % of the diseased, heredity was positive.

Those suffering from Diabetes Mellitus were monitored separately. This study covers five patients, or 7% of diabetics.



Distribution of patients with DM in relation to the total number



Distribution of patients according to the number of symptoms

The number of symptoms, due to which patients contacted a doctor, ranged from one to three symptoms. There were 26% of patients with one symptom, with two symptoms, there were 41% patients and, with three symptoms, there were 33% of those treated.

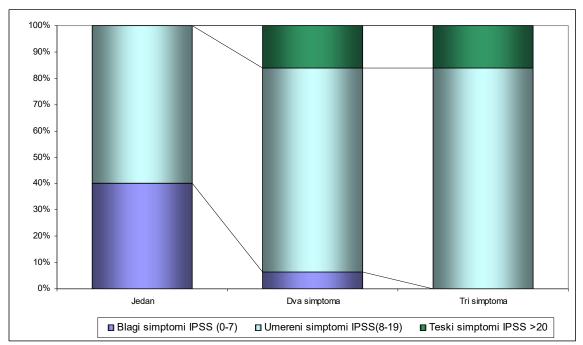
The table and graph show distribution of patients according to the number and severity of symptoms. Most patients with one symptom at the same time had the mildest clinical picture. Increase of the number of symptoms yields a more severe clinical picture. The number of symptoms is in a significant correlation with severity of symptoms according to IPSS score (p<0.01).

Distribution of patients according to the number and severity of symptoms

	Severity			
	Mild	Moderate	Severe symptom	
	symptoms IPSS (0-	symptoms IPSS(8-	s IPSS	Total
	7)	19)	>20	
One	8	12	0	20
Two	2	24	5	31



symptoms				
Three				
symptoms	0	21	4	25
Total	10	57	9	76



Distribution of patients according to the number and severity of symptoms

There was statistically significantly the biggest number of patients with one symptom and mild severity, or patients with two symptoms and moderate severity, by  $\chi 2=19.41 \text{ p} < 0.001$ .

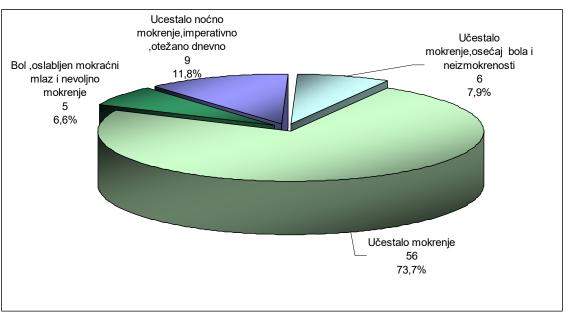
The most common symptom the patients had, at the beginning of the study, was nocturia, which had 56 (73.7%) patients, nocturia, labored daytime urination, in 9 (11.8%) patients, nocturia, feeling of pain and urinary retention, which had 6 (7.9%) patients, and pain, weakened libido, and weakened urine stream and enuresis, which had 5 (6.6%) patients.

	Number	Share (%)
Nocturia	56	73.68%
Pain, weakened libido, frequent urination		
and enuresis	5	6.58%
Nocturia, imperative, labored daytime	9	11.84%

Distribution of patients according to the type of symptoms



urination		
Frequent urination, feeling of pain and		
urinary retention	6	7.89%
Total	76	100%



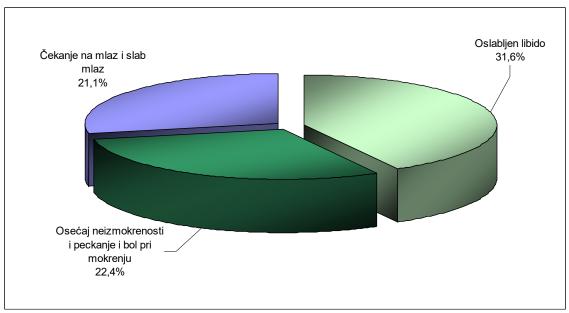
Distribution of patients according to the type of symptoms

In addition to individual symptoms like nocturia, patients also complained about:

- Weakened libido in 24 (31.6%) patients



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Distribution of patients according to several combined symptoms

- Feeling of urinary retention and burning and pain on urination in 17 (22.4%) patients
- Waiting for stream and weak stream in 16 (21.1%) patients while a smaller number of patients had a number of enumerated symptoms.

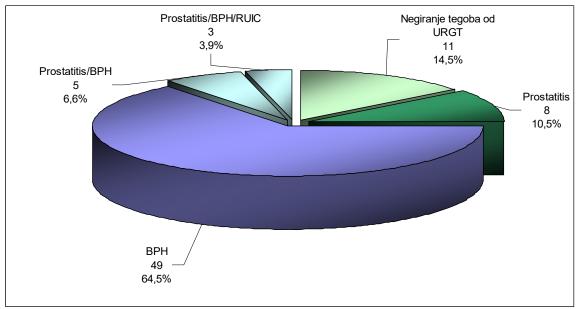
### PREVIOUS DIAGNOSIS AND THERAPY

Distribution of patients according to the previous diagnosis

	Number	Share (%)
Negation of difficulties		
from URGT	11	14.5%
Prostatitis	8	10.5%
BPH	49	64.5%
Prostatitis and BPH	5	6.6%
Prostatitis, BPH and RUIC	3	3.9%
Total	76	100.0%

Prior to this study, the diagnosis of prostatitis had had 8 (10.5%) patients, BPH had had 49 (64.5%) patients, prostatitis and BPH had had 5 (6.6%) patients and, prostatitis, BPH and RUIC had had 3 (3.9%) patients.

Previous difficulties from the urogenital tract were negated by 11 (14.5%) patients.



Distribution of patients according to the previous diagnosis

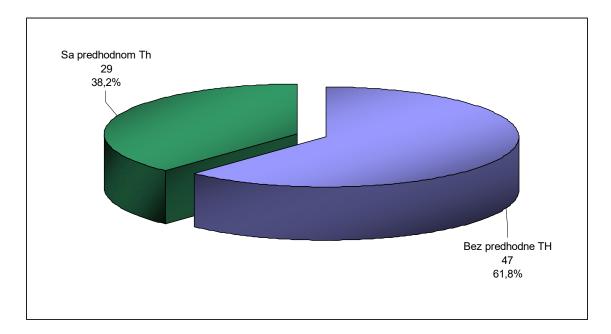
There was statistically significantly the biggest number of patients with previous BPH, by  $\chi 2=96.37$ , p<0.0001.

Distribution	of patients	according t	the previous	s therapy
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	Number	Share (%)
Without previous TI	47	61.8%
With previous Ti	29	38.2%
Total	76	100.0%

For previous diseases of urinary tract, therapy had been administered to 29 (38.2%) patients, while there had been 47 (61.8%) patients without therapy, out of whom as many as 36 patients had some of enumerated diagnoses, while 11 patients stated that they had not been previously treated for one of the diseases that were monitored.





Distribution of patients according to the previous therapy

There were statistically significantly more patients who, regardless of difficulties, were without previous therapy, by  $\chi 2=4.26$ , p<0.039.

Prior to this study, a total of 8 (10.5%) patients had had prostatitis as the diagnosis and, out of the total of eight patients with prostatitis, 5 (62.5%) had been without a therapy up to the beginning of this study, and 3 (37.5%) had had a therapy.

	Without previous TI		With previous Ti		Total	
	Nu		Nu			
	mbe		mbe		Numb	
	r	%	r	%	er	%
Negation of difficulties		100.0				
from URGT	11	%	0	0.0%	11	14.5%
				37.5		
Prostatitis	5	62.5%	3	%	8	10.5%
				46.9		
BPH	26	53.1%	23	%	49	64.5%
Prostatitis/BPH	4	80.0%	1	20.0	5	6.6%

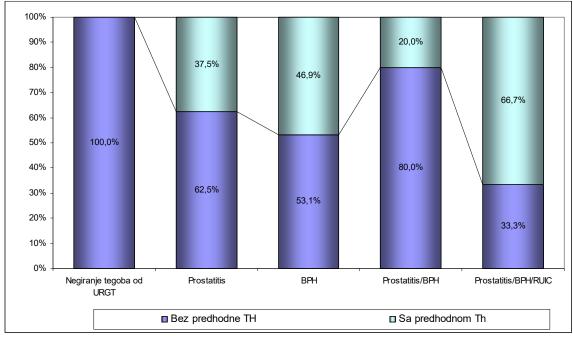


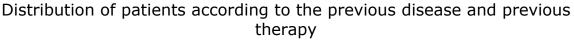
				%		
				66.7		
Prostatitis/BPH/RUIC	1	33.3%	2	%	3	3.9%
				38.2		100.0
Total	47	61.8%	29	%	76	%

Prior to this study, a total of 49 (64.5%) patients had had BPH, out of whom 26 (53.1%) had been without a therapy up to the beginning of this study, and 23 (46.9%) had had a therapy.

Prior to this study, 5 (6.6%) patients had had prostatitis and BPH, out of whom one (20%) had had a previous therapy.

Prior to this study, 3 (3.9%) patients had had prostatitis, BPH and RUIC, out of whom 2 (66.7%) had had a therapy.



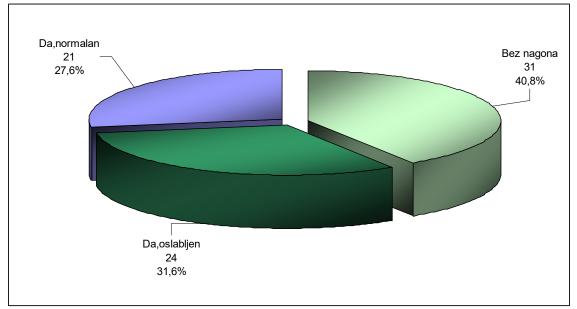


There was statistically significantly the biggest number of patients with previous prostatitis, BPH and RUIC and therapy, by  $\chi 2=10.122$ , p<0.038.

Absence of libido, at the beginning of the study, had as many as 31 (40.8%) patients, while weakened libido had 24 (31.6%) patients, and 21 (27.6%) patients said that they had normal libido.

	Number	Share (%)
Without instinct	31	40.8%
Yes, weakened	24	31.6%
Yes, normal	21	27.6%
Total	76	100.0%

#### Distribution of patients according to libido



Distribution of patients according to libido

There was the biggest number of patients with absence of libido, as well as patients with weakened libido, but significant difference among patients in relation to libido was not verified, by  $\chi 2=2.079$ , p=0.354.

#### ULTRASOUND DIAGNOSTICS

Patients had ultrasound examination, and US finding - of prostate volume, as well as residual urine in patients obtained by US diagnostics were monitored at the beginning, as well as at later checkups.

Average prostate volume and residual urine – US examination

Average value SD Minimum Maximun
----------------------------------



Prostate volume/US	32.12	9.35	15	58
Residual urine /US	47.52	25.46	0	110

Average prostate volume, at the beginning of treatment, on an average was  $32.12\pm9.35$ , with the minimum prostate volume of 15 and maximum prostate volume of 58.

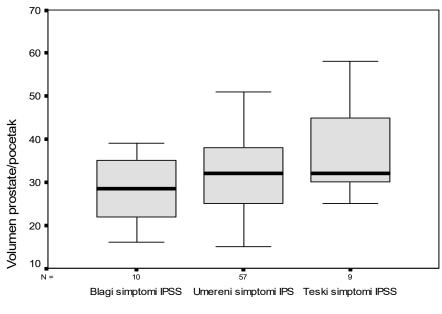
Average residual urine, at the beginning of treatment, was  $47.52\pm25.46$ , with the maximum residual urine of 110.

Average values of US finding of prostate volume and residual urine at the beginning of the study in relation to severity of symptoms

		Average	SD	95%	6 CI	Min.	Max.	
		value 3D L		Lower	Upper		Max.	
	Mild symptoms IPSS (0-7)	27.70	7.96	22.01	33.39	16	39	
Prostate volume	Moderate symptoms IPSS(8-19)	32.09	8.96	29.71	34.47	15	51	
	Severe symptoms IPSS >20	37.22	11.52	28.37	46.08	25	58	
	Total	32.12	9.35	29.98	34.26	15	58	
	Mild symptoms IPSS (0-7)	33.14	9.42	24.43	41.86	22	50	
Residual urine	Moderate symptoms IPSS(8-19)	46.22	25.25	38.97	53.48	8	99	
unic	Severe symptoms IPSS >20	65.78	26.97	45.05	86.51	30	110	
	Total	47.52	25.46	41.21	53.83	8	110	

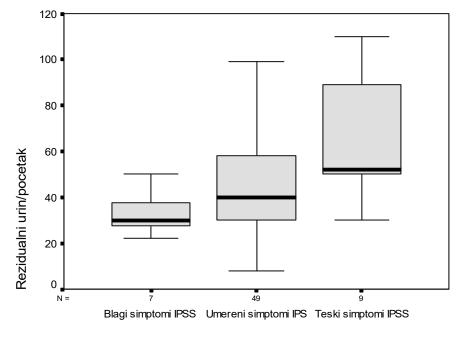
Average prostate volume in patients with mild symptoms on an average was  $27.7\pm7.96$ , in patients with moderate symptoms, average prostate volume was  $32.09 \pm 8.96$  and, in patients with severe symptoms, average prostate volume was  $37.2 \pm 11.52$ .





Tezina simptoma IPSS

Average prostate volume according to severity of symptoms



Tezina simptoma IPSS

Average residual urine according to severity of symptoms



Average residual urine, in patients with mild symptoms, on an average was 33.14±9.42.

In patients with moderate symptoms, average residual urine was 46.22±25.25.

In patients with severe symptoms, average residual urine was  $65.78 \pm 26.97$ .

#### DIGITO-RECTAL EXAMINATION OF PROSTATE (RT)

The size of prostate as well as prostate volume at digito-rectal examination of prostate was monitored at the beginning, as well as at later checkups.

Average size of prostate – RT examination

	Average value	SD	Minimum	Maximum
Size of prostate/RT	52.73	9.72	38	65.00

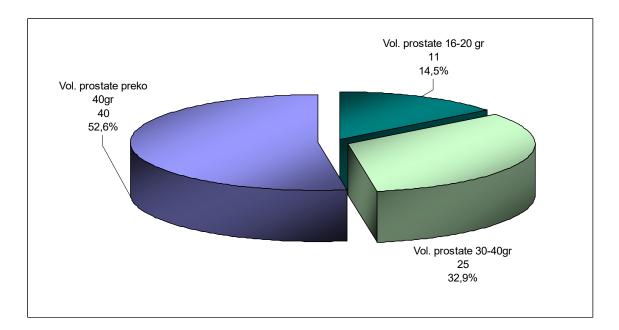
Average size of prostate, at the beginning of treatment, on an average was  $52.7 \pm 9.72$ , with the minimum prostate size of 38 and maximum one of 65. The table and graph below show distribution of patients according to prostate volume determined by digito-rectal examination of prostate (rectal touche).

Distribution of patients according to prostate volume\*

Prostate volume/RT	Number	Share (%)
Prostate volume of 16-20 gr	11	14.5%
Prostate volume of 30-40gr	25	32.9%
Prostate volume over 40gr	40	52.6%
Total	76	100.0%

\*- Prostate volume is a subjective finding





Distribution of patients according to prostate volume

At the beginning of the study, prostate volume in patients was determined by digito-rectal examination of prostate.

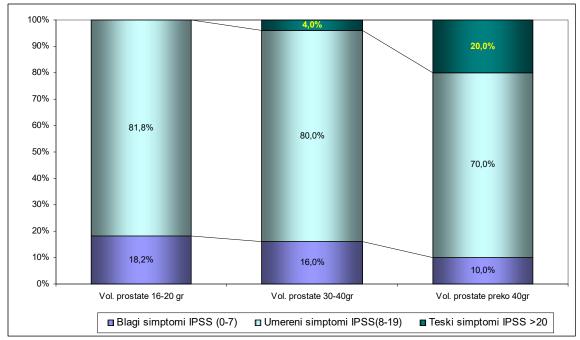
Prostate of a volume of 16-20 gr had 14.5% of patients, prostate of a volume of 30-40gr had 32.9% of patients, while the largest number of patients had prostate of a volume of 40 gr, as many as 52.6% of patients.

There was statistically significantly the biggest number of patients with prostate of over 40 grams, by  $\chi 2=30.87$ , p<0.0001.

Severity of symptoms in patients, at the beginning of the study, is in correlation with prostate volume.

The bigger the prostate, the patients were often classified to the group with higher IPSS score, or with more severe symptoms.





Distribution of patients according to prostate volume and severity of symptoms

Thus among the patients with prostate of a volume of 16-20 gr there were no those who had severe symptoms, while the share of patients with severe symptoms and prostate size of 30-40 gr was around 4%.

In the group of patients with prostate of a volume of 40 gr and with IPSS over 20, or with severe symptoms, there were 20% of patients.

#### **BIOCHEMICAL BLOOD ANALYSIS**

Biochemical determination of parameters of oxidative stress and apoptosis, as well as blood count was done on patients and, in this analysis, glycemia levels would be monitored, as well as tumor marker PSA, at the beginning of the study, as well as at later checkups.

Average values of glycemia and PSA at the beginning of the study

	Average	SD	Minimu	Maximum
	value		m	
Glycemia	5.61	1.42	3.30	12.90
Total PSA	3.23	1.43	1.10	8.21



FREE/ Total PSA	0.21	0.05	0.10	0.35	
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Average value of Total PSA, at the beginning of treatment, on an average was  $3.23 \pm 1.43$ , with the minimum value of 1.1 and maximum one of 8.21.

Average value of Free/Total PSA, at the beginning of treatment, on an average was  $0.21 \pm 0.05$ , with the minimum value of 0.1 and maximum one of 0.35.

#### GLYCEMIA IN PATIENTS WITH DIABETES MELLITUS

Average level of glycemia at the beginning of treatment on an average was  $5.61 \pm 1.43$ , with the minimum value of 3.3 and maximum one of 12.9.

Average values of glycemia at the beginning of the study in relation to DM

	Numb	Average	SD	95% CI		Min.	Max.	
	er	value	30	Lower	Upper	I*III1.	Max.	
Without DM	71	5.46	0.92	5.24	5.68	3.70	9.00	
DM	5	7.74	4.09	2.66	12.82	3.30	12.90	
Total	76	5.61	1.42	5.29	5.93	3.30	12.90	

Average level of glycemia in patients without DM, at the beginning of treatment, on an average was  $5.46 \pm 0.92$ , with the minimum value of 3.7 and maximum one of 9.

Average level of glycemia in patients with DM, at the beginning of treatment, on an average was  $7.74 \pm 4.09$ , with the minimum value of 3.3 and maximum one of 12.9.

#### TOTAL PSA AND FREE/TOTAL PSA

Average value of Total PSA in patients with mild symptoms, at the beginning of treatment, on an average was  $2.35 \pm 0.52$ , with the minimum value of 1.74 and maximum one of 3.50.

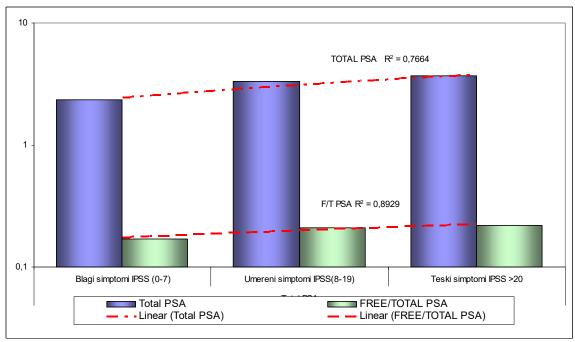
Average value of Total PSA in patients with moderate symptoms, at the beginning of treatment, on an average was  $3.30\pm1.43$ , with the minimum value of 1.10 and maximum one of 8.20.

Average value of Total PSA in patients with severe symptoms, at the beginning of treatment, on an average was  $3.71 \pm 1.79$ , with the minimum value of 2.3 and maximum one of 8.21.

		Nu			95%	6 CI		
		mb	Average		Lowe			
		er	value	SD	r	Upper	Min.	Max.
	Mild symptoms IPSS							
	(0-7)	10	2.35	0.52	1.97	2.72	1.74	3.50
	Moderate symptoms							
	IPSS(8-19)	57	3.30	1.43	2.92	3.68	1.10	8.21
	Severe symptoms							
Total	IPSS >20	9	3.71	1.79	2.33	5.07	2.10	8.10
PSA	Total	76	3.23	1.43	2.90	3.55	1.10	8.21
	Mild symptoms IPSS							
	(0-7)	10	0.17	0.04	0.14	0.19	0.10	0.22
	Moderate symptoms							
	IPSS(8-19)	57	0.21	0.05	0.20	0.23	0.10	0.33
FREE/	Severe symptoms							
Total	IPSS >20	9	0.23	0.06	0.18	0.27	0.15	0.35
PSA	Total	76	0.21	0.05	0.20	0.22	0.10	0.35

Average values of PSA at the beginning of the study in relation to severity of symptoms





Trends of average values of PSA at the beginning of the study in relation to severity of symptoms

Average value of Free/Total PSA with mild symptoms, at the beginning of treatment, on an average was  $0.17 \pm 0.04$ , with the minimum value of 0.10 and maximum one of 0.22.

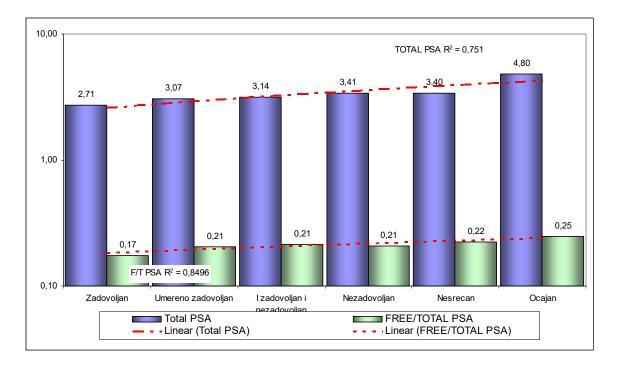
Average value of Free/ Total PSA with moderate symptoms, at the beginning of treatment, on an average was  $0.21 \pm 0.05$ , with the minimum value of 0.11 and maximum one of 0.33.

Average value of Free/Total PSA with severe symptoms, at the beginning of treatment, on an average was  $0.22 \pm 0.04$ , with the minimum value of 0.15 and maximum one of 0.35.

By Anova testing, statistically significant difference in the level of Total PSA in relation to severity of symptoms was not proven, F=2.585, p=0.082.

By Anova testing, **statistically** significant difference in the level of Free/Total PSA in relation to severity of symptoms was not proven, F=4.310, p<0.017.





Trends of average values of PSA at the beginning of the study in relation to assessment of quality of life

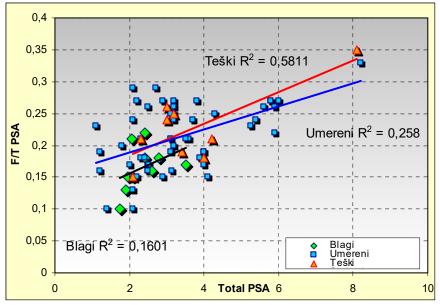
By Anova testing, statistically significant difference in the level of Total PSA in relation to assessment of quality of life was not proven, F=1.113, p=0.362.

By Anova testing, statistically significant difference in the level of Free/Total PSA in relation to assessment of quality of life was not proven, F=1.199, p=0.328.

The graph below shows correlation of values of Total PSA and values of Free/Total PSA in patients, at the beginning of the study, according to severity of symptoms with which patients were admitted for treatment.



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Correlation of values of Total PSA and F/T PSA at the beginning of the study in relation to severity of symptoms

With the increase of severity of symptoms, coefficient of linear correlation of the two parameters also grows.

In patients with mild symptoms, coefficient of linear correlation is insignificant (R2=0.160) while, in patients with moderate symptoms, coefficient of linear correlation grows (R2=0.258).

In patients with severe symptoms, coefficient of linear correlation is significant (R2=0.581), by p<0.01.

The value of Total PSA is in correlation with the values of Free/Total PSA in patients with severe symptoms (p<0.01).

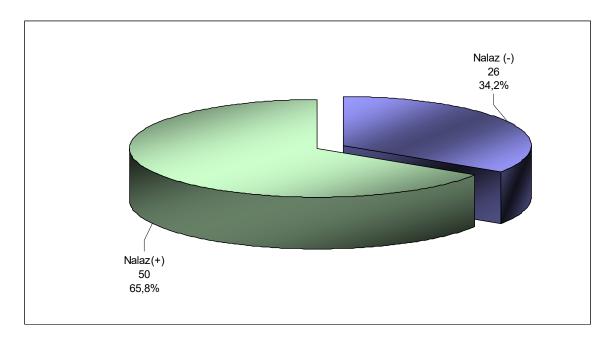
### URINE AND SPERM CULTURE TESTS

Laboratory analyses of urine, urine culture, as well as of sperm culture were done on patients, monitored at the beginning, as well as at later checkups.



	Numb	Share
Urine	er	(%)
Finding (-)	26	34.2%
Finding (+)	50	65.8%
Total	76	100.0%

# Distribution of patients in relation to urine findings



Distribution of patients in relation to urine finding

Negative urine findings were found in 26 (34.2%) patients and, positive urine findings, in 50 (65.8%) patients.

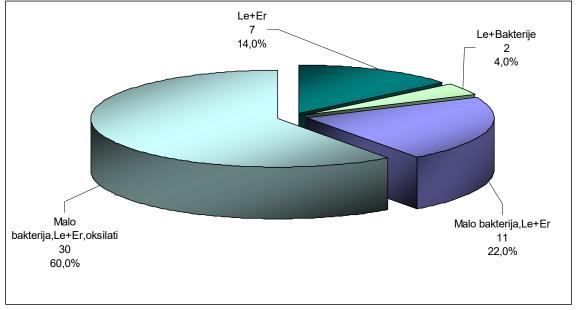
There was statistically significantly more patients, at the beginning of the study, with positive urine finding, by  $\chi 2=7.58$ , p<0.006.

Among patients, there were 50 of them with positive urine findings, out of that number, in 7 (14%) patients, urine contained leucocytes and erythrocytes, in 2 (4%), leucocytes and bacteria, in 11 (4%) patients, leucocytes, erythrocytes, and some bacteria and, in 30 (60%) patients, in urine findings there were oxalates, leucocytes, erythrocytes, and some bacteria.



	Numbe	Share
	r	(%)
Le+Er	7	14.0%
Le+Bacteria	2	4.0%
Some bacteria, Le+Er	11	22.0%
Some bacteria, Le+Er,		
oxalates	30	60.0%
		100.0
Total	76	%

Distribution of patients in relation to positive urine finding



Positive urine findings

There was statistically significantly more patients, at the beginning of the study, with positive urine findings including oxalates, leucocytes, erythrocytes and some bacteria, by  $\chi 2=16.61$ , p<0.0001.

Distribution of patients in relation to urine culture findings

	Numb	Share
Urine culture	er	(%)
Findings normal	53	69.7%
E colli	19	25.0%
Not done	4	5.3%

Total	76 100.0%
-------	-----------

Among patients, there were 53 with negative urine culture findings, in 19 (25%) patients, E.Colli was found, on 4 (5.3%) patients, urine culture was not done.

There was statistically significantly more patients, at the beginning of the study, with normal urine culture findings, by  $\chi 2=49.76$ , p<0.0001.

Among patients, there were 15 with negative sperm culture findings, in 2 (2.6%) patients, E.Colli was found, in 3 (3.9%), a mass of leucocytes was diagnosed, while sperm culture was not done on 56 (73.7%) of patients.

Distribution of patients in relation to urine culture findings

	Numb	Share
Sperm culture	er	(%)
Findings normal	15	19.7%
E colli	2	2.6%
Mass of Le	3	3.9%
Not done	56	73.7%
Total	76	100.0%

There were statistically significantly more patients, at the beginning of the study, with normal sperm culture findings, by  $\chi 2=101.51$ , p<0.0001.

#### DIAGNOSIS AND THERAPY IN PATIENTS WITH DIABETES MELLITUS AT THE BEGINNING OF THE STUDY

Therapy of those suffering from DM in relation to diagnosis was as follows:

- 1 (20%) of those suffering from prostatitis with the therapy with Conprosta,
- 3 (60%) of those suffering from DM had BPH, out of whom one patient had therapy with Conprosta, and two with Conprosta and Finasterid,
- While 1 (20%) of the diseased had both BPH and prostatitis with therapy with Conprosta.



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### DIAGNOSIS AND THERAPY OF PATIENTS AT THE BEGINNING OF THE STUDY

Among the patients covered by the study, there were 10 (13.2%) of those suffering from prostatitis, 56 (73.7%) had BPH, and 10 (13.2%) of the diseased had both BPH and prostatitis.

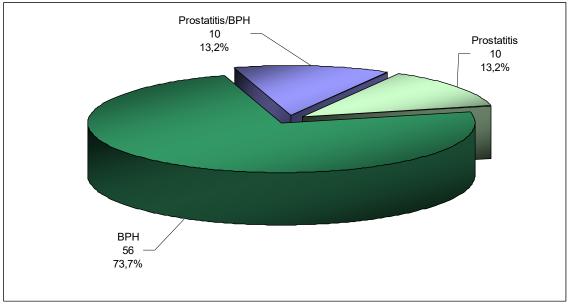
			Conprosta				
				and		rosta and	
	Con	prosta	ant	antibiotic		nasterid	Total
	Nu		Nu		Nu		
	mbe		mb		mb		
	r	Share	er	Share	er	Share	Number
Prostatitis	3	30.0%	7	70.0%	0	0.0%	10
BPH	33	58.9%	6	10.7%	17	30.4%	56
Prostatitis/BPH	3	30.0%	6	60.0%	1	10.0%	10
Total	39	51.3%	19	25.0%	18	23.7%	76

Distribution of patients in relation to diagnosis and therapy

Among the patients covered by the study, there were 10 (13.2%) of those suffering from prostatitis out of whom:

- Three (20%) patients were administered Conprosta and seven (70%) got Conprosta and antibiotics,





Distribution of patients in relation to diagnoses

Among the patients covered by the study, there were 56 (73.7%) who had BPH:

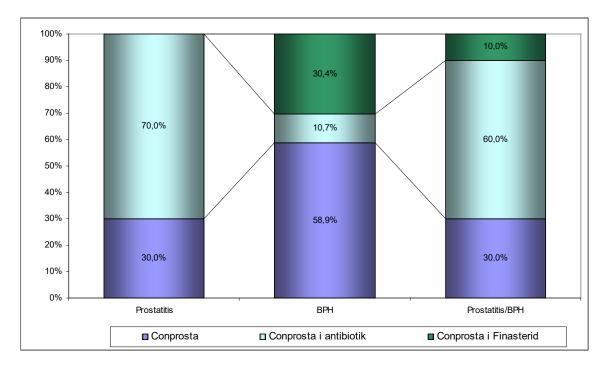
 - 33 (58.9%) patients were administered Conprosta, 6 (10.7%) patients received Conprosta and antibiotics, and 17 (30.4%) patients with BPH were administered Conprosta and Finasterid as therapy.

Among the patients covered by the study, 10 (13.2%) of the diseased had both BPH and prostatitis:

 3 (30%) patients were administered Conprosta, 6 (60%) received Conprosta and antibiotics, and 1 (10%) patient with prostatitis and BPH was administered Conprosta and Finasterid as therapy.

Among the patients covered by the study, there was one patient, who had prostatitis and took Conprosta and, by the third month, he went on surgical treatment.





Distribution of patients in relation to diagnoses and therapy

There was statistically significantly the biggest number of patients, at the beginning of the study, with BPH who were administered only Conprosta as therapy while, among the patients with prostatitis, the most frequent therapy was a combination of Conprosta and antibiotic, as well as in patients with BPH and prostatitis, by  $\chi 2=24.19$ , p<0.0001.

Among the patients covered by the study in relation to heredity and diagnosis, there were 10 (13.2%) of those suffering from prostatitis, out of whom, positive heredity had 20% of the diseased.

	Without I	heredity	Here		
	Number	Share	Number	Share	Total
Prostatitis	8	80.0%	2	20.0%	10
BPH	30	53.6%	26	46.4%	56
Prostatitis/BPH	6	60.0%	4	40.0%	10
Total	44	57.9%	32	42.1%	76

# Distribution of patients in relation to diagnoses and heredity



Out of 56 of those suffering from BPH, positive heredity had 46.4% of the diseased and out of 10 (13.2%) of those suffering from BPH and prostatitis, positive heredity had 40% of the diseased.

Statistically significant difference among patients according to the diagnosis and heredity was not verified, although there were more patients, at the beginning of the study, with positive heredity and BPH, by  $\chi 2=2.45$ , p=0.293.

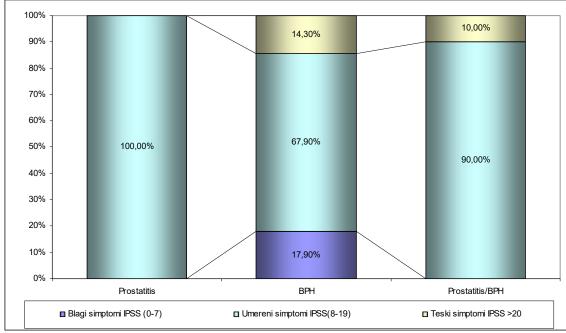
Out of a total of 10 of those suffering from prostatitis, all had moderate symptoms, out of 56 of those suffering from BPH, there were 17.9% of patients who had mild symptoms, 67.9% of patients had moderate symptoms, and 14.3% of patients had severe symptoms.

	Mild		Moderate		Severe		
		ptoms	,	symptoms		ptoms	
	IPSS	(0-7)	IPSS	(8-19)	IPS	S >20	
	Num		Num		Num		
	ber	Share	ber	Share	ber	Share	Total
Prostatitis	0	0.0%	10	100.0%	0	0.0%	10
BPH	10	17.9%	38	67.9%	8	14.3%	56
Prostatitis/BPH	0	0.0%	9	90.0%	1	10.0%	10
Total	10	13.2%	57	75.0%	9	11.8%	76

Distribution of patients in relation to diagnoses and symptoms

Out of 10 of the diseased with BPH and prostatitis, 90% of patients had moderate symptoms, and 10% of patients had severe symptoms.





Distribution of patients in relation to diagnoses and symptoms

Statistically significant difference among patients according to the diagnosis and severity of symptoms was not verified, although there were more patients, at the beginning of the study, with moderate mild symptoms and BPH, as well as with BPH and severe symptoms in relation to prostatitis and BPH, by  $\chi 2=6.58$ , p=0.160.

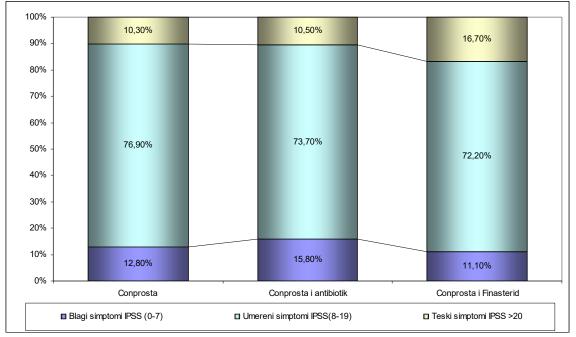
Distribution of patients in relation to therapy and severity of symptoms

	Mild		Мо	derate	9	Severe	
		nptoms		nptoms		mptoms	
	IPS	<u>S (0-7)</u>	IPSS	5(8-19)	IP	<u>SS &gt;20</u>	Total
	Nu		Nu		Nu		
	mb		mb		mb		
	er	Share	er	Share	er	Share	Number
Conprosta	5	12.8%	30	76.9%	4	10.3%	39
Conprosta							
and antibiotic	3	15.8%	14	73.7%	2	10.5%	19
Conprosta							
and Finasterid	2	11.1%	13	72.2%	3	16.7%	18
Total	10	13.2%	57	75.0%	9	11.8%	76

Out of a total of 39 of the diseased with therapy with Conprosta, 12.8% of patients had mild symptoms; moderate symptoms had 76.9% and, severe ones, 10.3% of the diseased.

Among 19 of the diseased who were administered Conprosta and antibiotic as therapy, 15.8% of the patients had mild symptoms, 73.7% of patients had moderate symptoms, and 10.5% of patients had severe symptoms.

Out of 18 of the diseased who were administered Conprosta and Finasterid as therapy, 11.1% of patients had mild symptoms, 72.2% of patients had moderate symptoms, and 16.7% of patients had severe symptoms.



Distribution of patients in relation to therapy and severity of symptoms

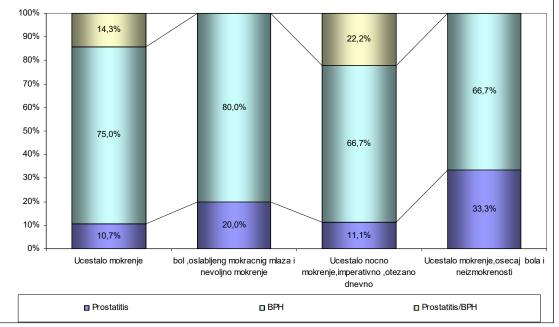
Statistically significant differences among patients according to the type of therapy and severity of symptoms was not verified, although there were insignificantly more patients, at the beginning of the study, with moderate and mild symptoms, who were administered only Conprosta, by  $\chi 2=0.667$ , p=0.955.

As the most common symptom patients had, at the beginning of the study, nocturia stands out, which had 56 (73.7%) patients, out of that number, 10% of patients had prostatitis, 75% of the diseased had BPH, and 14.3% of the diseased had both BPH and prostatitis.

Nocturia, as well as labored daytime urination, decreased libido had 9 (11.8%) patients, out of that number, 20% had prostatitis and, 85% of the diseased had BPH.

Nocturia, feeling of pain and feeling of urinary retention as well as decreased libido, which had 6 (7.9%) patients, out of that number, 11.1% had prostatitis, 66.7% of the diseased had BPH, and 22.2% of the diseased had both BPH and prostatitis.

Pain, weakened urine stream, and enuresis had 5 (6.6%) patients, out of that number, 33.3% had prostatitis while 66.7% of the diseased had BPH.



Distribution of patients in relation to diagnoses and symptoms

Statistically significant difference among patients according to symptoms and diagnosis was not verified, although there were insignificantly more patients, at the beginning of the study, with nocturia and BPH, by  $\chi 2=4.521$ , p=0.607.

Distribution of patients in relation to diagnoses and libido

W	Vithou	ıt instinct		Yes, akened	Yes	, normal	Total
			Nu		Nu		
N	lum		mb		mb		Numbe
L t	ber	Share	er	Share	er	Share	r

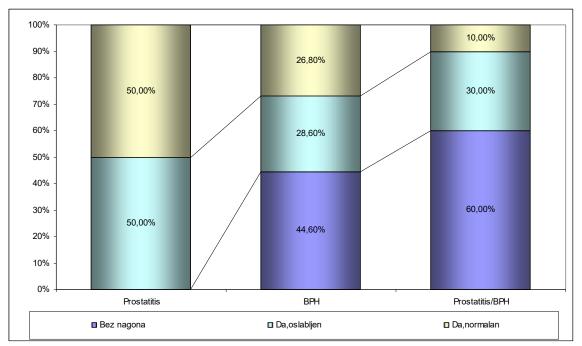


Prostatitis	0	0.0%	5	50.0%	5	50.0%	10
BPH	25	44.6%	16	28.6%	15	26.8%	56
Prostatitis/BPH	6	60.0%	3	30.0%	1	10.0%	10
Total	31	40.8%	24	31.6%	21	27.6%	76

Among patients covered by the study, there were 10 (13.2%) of those suffering from prostatitis, out of whom 50% had weakened libido, and 50% had normal libido.

BPH had 56 (73.7%) of the diseased, out of whom 44.6% were without sexual instinct, 28.6% patients had weakened libido, and 26.8% patients had normal libido.

Out of 10 (13.2%) of the diseased with BPH and prostatitis, 60% were without sexual instinct, 30% patients had weakened libido, and 10% patients had normal libido.



Distribution of patients in relation to diagnoses and libido

There was statistically significantly the biggest number of patients, at the beginning of the study, with BPH and prostatitis, who had absence of libido, by  $\chi 2=9.39$ , p<0.05.

Distribution of patients in relation to the therapy and libido



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				Yes,			
	Withou	ut instinct	we	akened	Yes	, normal	Total
			Nu		Nu		
	Num		mb		mb		
	ber	Share	er	Share	er	Share	Number
Conprosta	12	30.8%	15	38.5%	12	30.8%	39
Conprosta and antibiotic	8	42.1%	4	21.1%	7	36.8%	19
Conprosta	0	42.170	4	21.170	/	50.070	19
and							
Finasterid	11	61.1%	5	27.8%	2	11.1%	18
Total	31	40.8%	24	31.6%	21	27.6%	76

Among patients covered by the study, who were administered Conprosta, 30.8% were without sexual instinct, 38.5% had weakened libido, and 30.8% had normal libido.

Conprosta and antibiotic as therapy were administered to and without sexual instinct were 42.1% of the diseased, while 21.1% of patients had weakened libido, and 36.8% of patients had normal libido with this therapy.

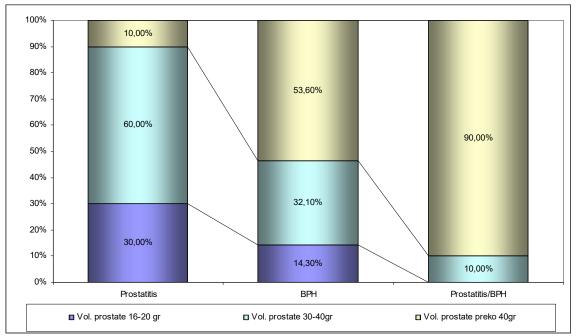
Conprosta and Finasterid as therapy were administered to and without sexual instinct were 61.1% of the diseased, while 27.8% of patients had weakened libido, and 11.1% of patients had normal libido with this therapy.

Statistically significant difference among patients, at the beginning of the study, in relation to therapy and libido was not verified, by  $\chi 2=6.63$ , p=0.157.

	16	-20 gr	30	)-40gr	0	ver 40gr	
	Nu		Nu				
Prostate	mb		mb		Num		Total
volume / dg	er	Share	er	Share	ber	Share	Number
Prostatitis	3	30.0%	6	60.0%	1	10.0%	10
BPH	8	14.3%	18	32.1%	30	53.6%	56
Prostatitis/BPH	0	0.0%	1	10.0%	9	90.0%	10
Total	11	14.5%	25	32.9%	40	52.6%	76

Distribution of patients in relation to diagnosis and prostate volume





Distribution of patients in relation to diagnoses and prostate volume

Among the patients covered by the study, out of 10 suffering from prostatitis, 30% had prostate of 16-20 gr, and 60% had prostate of 30-40gr, and 10% of those with prostatitis had prostate of over 40gr.

BPH had 56 of the diseased, out of whom 14.3% of the diseased had prostate of 16-20 gr, 32.1% of the diseased had prostate of 30-40gr, and 53.6% of the diseased with BPH had prostate of over 40gr.

Out of 10 of the diseased with BPH and prostatitis, 10% of the diseased had prostate of 30-40 gr, and 90% of those suffering from BPH and prostatitis, had prostate of 16-20 gr.

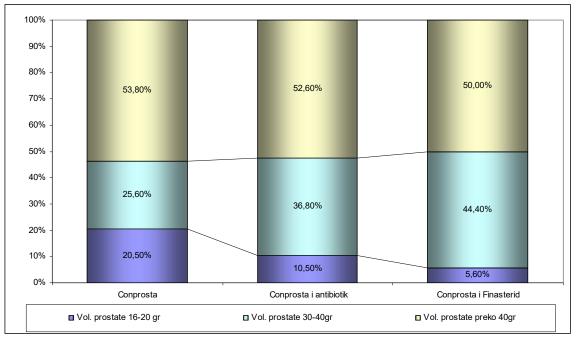
There was statistically significantly the biggest number of patients, at the beginning of the study, with BPH and prostatitis, who had prostate volume of 16-20gr, by  $\chi 2=13.07$ , p<0.011.

	16	5-20 gr	30	-40gr	0	ver 40gr	
	Nu						Total
Prostate	mb		Num		Num		Numbe
volume/therapy	er	Share	ber	Share	ber	Share	r
Conprosta	8	20.5%	10	25.6%	21	53.8%	39

Distribution of patients in relation to therapy and prostate volume



Conprosta and antibiotic	2	10.5%	7	36.8%	10	52.6%	19
Conprosta and							
Finasterid	1	5.6%	8	44.4%	9	50.0%	18
Total	11	14.5%	25	32.9%	40	52.6%	76



Distribution of patients in relation to therapy and prostate volume

Among the patients covered by the study, out of 39 of the diseased with the therapy with Conprosta, 20.5% had prostate of 16-20 gr, and 25.6% had prostate of 30-40gr, and 53.8% of the diseased had prostate of over 40gr.

Conprosta and antibiotics were administered to 19 of the diseased, out of whom 10.5% of the diseased had prostate of 16-20 gr, 36.8% of the diseased had prostate of 30-40gr, and 52.6% of the diseased had prostate of over 40gr.

Out of 10 of the diseased, who were administered Conprosta and Finasterid, 5.6% of the diseased had prostate of 16-20 gr, 44.4% of the diseased had prostate of 30-40gr, and 50% of the diseased had prostate of over 40gr.



# THE FIRST CHECKUP AFTER THREE MONTHS

# IPSS SCORE, QUALITY OF LIFE, AND SEVERITY OF SYMPTOMS AFTER 3 MONTHS AT THE FIRST CHECKUP

After three months, 70 (92.1%) patients continued with the treatment. One (1.3%) patient got allergy and stopped treatment with Conprosta, one patient (1.3%) was referred to surgical treatment, and four (5.3%) patients ended treatment after the checkup at the end of treatment after 3 months.

At the beginning of the study, as well as at control measurements, patients filled in a standardized questionnaire (International Prostate Symptom Score – IPSS). Average IPSS symptom score, before the beginning of treatment, had ranged from 3 to 30, and on an average it had been  $16.28\pm5.8$  and, at the first checkup after 3 months, average IPSS symptom score ranged from 2 to 25 and, on an average it was  $13.53 \pm 5.06$ .

Comparison of the level of average IPSS in relation to severity of symptoms at the beginning and after three months

		Average		
Student's T test	Ν	value	SD	T test
IPSS	74	16.62	5.57	
IPSS (3 months)	74	13.53	5.06	0.000

By testing values of IPSS score by paired Student's T test at the first checkup in relation to IPSS score at the beginning of the study, in 74 patients, it was concluded that average IPSS was statistically significantly lower in patients after three-month therapy (p<0.0001).

Distribution of patients according to severity of symptoms (IPSS)

	Numbe r	Share (%)
Mild symptoms IPSS (0-7)	10	13.5%
Moderate symptoms IPSS		
(8-19)	56	75.7%
Severe symptoms IPSS >20	8	10.8%
Total	74	100.0%



IPSS score of 0-7, or the group of patients with mild symptoms, accounted for 10 (13.5%) patients, the group with moderate symptoms, or IPSS of 8-19, accounted for 56 (75.7%) patients and, the group with severe symptoms, or IPSS of 20 and over, accounted for 8 (10.8%) patients. One patient with severe and one with moderate symptoms stopped treatment because of allergic reactions to the therapy and were referred for further surgical treatment.

There was statistically significantly the biggest number of patients with moderate symptoms (75.7% of those treated), by  $\chi 2=59.78 \text{ p}<0.0001$ .

IPSS	Ν	Avera	SD	95%	6 CI	Min.	Max.	
		ge		Lower	Upper			
Mild symptoms IPSS (0-7)	8	4.00	1.20	3.00	5.00	2	5	
Moderate symptoms	57	13.54	2.85	12.79	14.30	7	19	
IPSS(8-19)								
Severe symptoms IPSS	9	21.89	2.47	19.99	23.79	19	25	
>20								
Total	74	13.53	5.06	12.35	14.70	2	25	

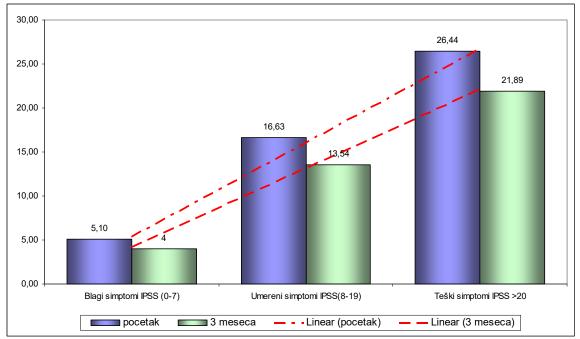
Average IPSS in relation to severity of symptoms after three months

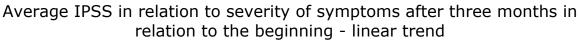
Average IPSS symptom score, after 3 months of treatment, on an average was  $4\pm1.2$  in patients with mild symptoms.

Average IPSS symptom score in patients with moderate symptoms was  $13.54 \pm 2.85$ .

In patients with severe symptoms, average IPSS was  $21.89 \pm 2.47$ .







Comparison of the level of average IPSS in relation to severity of symptoms at the beginning and after three months

Severity of symptoms IPSS	Checkup	Avera ge	SD	Univariate 4- factor analysis
Mild symptoms	Beginning	5.10	1.37	
IPSS (0-7)	3 months	4.00	1.20	
Moderate	Beginning	16.63	2.48	
symptoms IPSS (8- 19)	3 months	13.54	2.85	F=18.657,
Severe symptoms	Beginning	26.44	2.55	p<0.001
IPSS >20	3 months	21.89	2.47	
Total	Beginning	16.28	5.89	
iotai	3 months	13.53	5.06	

By testing values of IPSS score using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in relation to severity of symptoms in patients, it was concluded that average IPSS was statistically

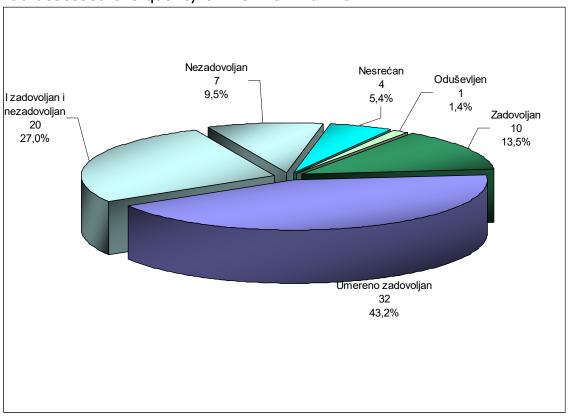


significantly lower in patients in relation to the severity of symptoms after three-month therapy (p<0.001).

Distribution of patients according to assessment of quality of life after three months

Quality of life	Number	%	
Enthusiastic (0)	1	1.4%	
Satisfied (1)	10	13.5%	
Moderately satisfied (2)	32	43.2%	
Both satisfied and dissatisfied (3)	20	27.0%	
Dissatisfied (4)	7	9.5%	
Miserable (5)	4	5.4%	
Total	74	100%	

After 3 months of treatment, there were no more desperate patients, who had assessed the quality of life with mark 6.



Distribution of patients according to assessment of quality of life after three months



There were statistically significantly more patients with the assessment of the quality of life – moderately satisfied (43.2%), then with the assessment: both satisfied and dissatisfied - (27% of those treated), then with the assessment of quality of life - satisfied - (13.5%), by  $\chi$ 2=54.92, p<0.001, while there was significantly less enthusiastic (1.4%) patients after 3 months, (at the beginning of treatment, there had been no enthusiastic ones).

Assessment of quality of life at the beginning and after three months

	Numb			Percentiles			
		I Min.	n. Max	25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	
	er			25	Median	75	
Beginning/Quality of life	76	1	6	2	3	4	
3 months/Quality of life	74	0	5	2	2	3	

Testing of median by Z test

	Qual	ity of life - quality of life	
Z		-6.018	
Asymp. Sig. (2-tailed)		0.000	
Monte Carlo Sig. (2-tailed)	Sig.	0.000	

Patients assessed the quality of life, at the beginning of the study, with marks from 1 to 6. Median of quality of life in 76 patients, at the beginning of the study, was 3, or "Both satisfied and dissatisfied". Patients assessed the quality of life, after 3 months of treatment, with marks from 0 to 5. Median of the quality of life in 74 patients, after 3 months, was 2, or "Moderately satisfied".

Median of assessment of the quality of life after three months of treatment was statistically significantly higher (p<0.001).

# SYMPTOMS AND LIBIDO AFTER 3 MONTHS AT THE FIRST CHECKUP IN RELATION TO THE BEGINNING OF THE TRIALS

After the checkup after 3 months, when 4 patients ended treatment, 1 stopped the treatment because of allergy, and one because of interruption of

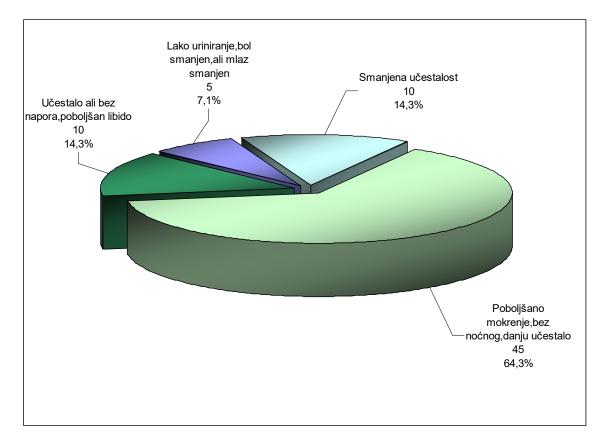


drug treatment, and there remained 70 patients. Their symptoms were as follows:

The most common symptom the patients had, at the beginning of the study, was nocturia, which had 56 (73.7%) patients, nocturia, labored daytime urination, which had 9 (11.8%) patients, nocturia, feeling of pain and urinary retention, which had 6 (7.9%) patients, and pain, weakened urine stream and enuresis, which had 5 (6.6%) patients.

Distribution of patients according to the type of symptoms after three months

	Number	Share (%)
Improved urination, without nocturia,		
frequent in daytime	45	64.3%
Frequent but without labor, improved libido	10	14.3%
Easy urination, pain reduced, as well as		
reduced stream	5	7.1%
Reduced frequency	10	14.3%
Total	70	100.0%





# Distribution of patients according to the type of symptoms after three months

The most common symptoms patients had, after three months of treatment, were improved urination, without nocturia, frequent in daytime, which had 45 (64.3%) patients, frequent but without labor, improved libido, which had 10 (14.3%) patients, easy urination, pain reduced, as well as stream still reduced, which had 5 (7.1%) patients, and improved urination with reduced frequency, which had 10 (14.3%) patients.

#### ULTRASOUND DIAGNOSTICS AFTER 3 MONTHS AT THE FIRST CHECKUP IN RELATION TO THE BEGINNING OF THE TRIALS

Average prostate volume, after three months of treatment, on an average was  $29.56\pm8.56$ , with the minimum prostate volume of 15 and maximum prostate volume of 47.

Average prostate volume and residual urine – US examination after three months

	Average value	SD	Minimum	Maximum
Prostate volume/US	29.56	8.56	15.00	47.00
Residual urine /US	34.24	21.85	0.00	95.00

Average residual urine, after 3 months of treatment, was  $34.24 \pm 21.85$ , with the maximum residual urine of 95.

#### Paired T test

		Average	SD	T test	
Pair 1	Prostate volume/Beginning	32.12	9.35	T test=6.531	
	Prostate volume/3m	29.64	8.89	p<0.001	
Pair 2	Residual urine / Beginning	47.52	25.46	T test=6.732	
	Residual urine /3m	34.24	21.85	p<0.001	

By testing values of prostate volume by paired T test at the first checkup in relation to prostate volume at the beginning of the study, it was concluded



that average prostate volume was statistically significantly lower in patients after three-month therapy (p<0.001).

By testing values of residual urine by paired T test at the first checkup in relation to residual urine at the beginning of the study, it was concluded that average residual urine was statistically significantly lower in patients after three-month therapy (p<0.001).

		Average value	SD	95% Lower	6 CI Upper	Min.	Max.
	Mild symptoms IPSS (0-7)	32.00	8.58	23.00	41.00	20.00	45.00
Prostate volume	Moderate symptoms IPSS(8-19)	29.25	8.52	26.95	31.56	16.00	47.00
Volume	Severe symptoms IPSS >20	29.78	9.50	22.48	37.08	17.00	45.00
	Total	29.56	8.56	27.52	31.60	16.00	47.00
	Mild symptoms IPSS (0-7)	27.50	5.54	21.69	33.31	20.00	35.00
Residual urine	Moderate symptoms IPSS(8-19)	33.67	23.35	26.89	40.45	0.00	95.00
	Severe symptoms IPSS >20	41.78	19.39	26.87	56.68	15.00	75.00
	Total	34.24	21.85	28.74	39.74	0.00	95.00

Average values of US finding of prostate volume and residual urine after three months in relation to severity of symptoms

Average prostate volume in patients with mild symptoms on an average was  $32\pm8.58$ , in patients with moderate symptoms, average prostate volume was  $29.25\pm8.52$  and, in patients with severe symptoms, average prostate volume was  $29.78\pm9.50$ .

Average residual urine in patients with mild symptoms on an average was  $27.50\pm5.54$ , in patients with moderate symptoms, average residual urine was  $33.67\pm23.35$  and, in patients with severe symptoms, average residual urine was  $41.78\pm19.39$ .

By testing values of prostate volume using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in relation to

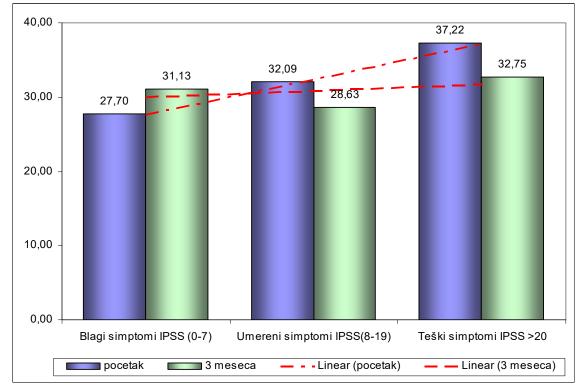


severity of symptoms, it was concluded that average prostate volume was lower in patients in relation to severity of symptoms after three-month therapy (p=ns), but not statistically significantly.

Comparison of the level of average prostate volume in relation to severity of symptoms at the beginning and after three months

Severity of symptoms IPSS/Prostate volume	Checkup	Avera ge	SD	U univariate 4-factor analysis
Mild symptoms	Beginning	27.70	7.96	
IPSS (0-7)	3 months	31.13	6.75	
Moderate	Beginning	32.09	8.96	
symptoms IPSS (8- 19)	3 months	28.63	8.75	F=2.123, p=0.062
Severe symptoms	Beginning	37.22	11.52	p=0.062
IPSS >20	3 months	32.75	7.59	
Total	Beginning	32.12	9.35	
iotai	3 months	29.42	8.43	

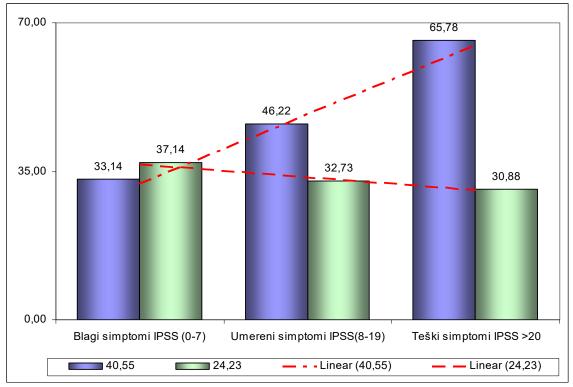




Comparison of the level of average prostate volume in relation to severity of symptoms at the beginning and after three months

Comparison of the level of average residual urine in relation to severity of symptoms at the beginning and after three months

Severity of symptoms IPSS/ res. urine	Checkup	Avera ge	SD	Univariate 4- factor analysis
Mild symptoms	Beginning	33.14	9.42	
IPSS (0-7)	3 months	37.14	16.69	
Moderate	Beginning	46.22	25.25	
symptoms IPSS (8-19)	3 months	32.73	22.18	F=0.523,
Severe symptoms	Beginning	65.78	26.97	p=0.471
IPSS >20	3 months	30.88	13.48	
Total	Beginning	47.52	25.46	
iulai	3 months	33.00	20.48	



Comparison of the level of average residual urine in relation to severity of symptoms at the beginning and after three months

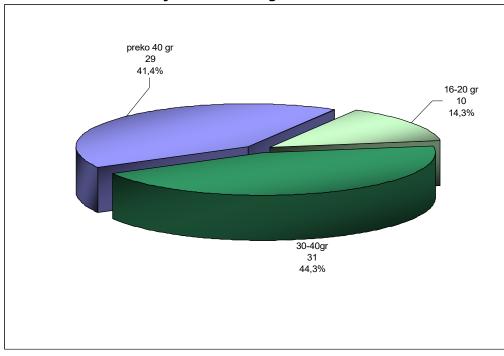
By testing values of residual urine using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in relation to severity of symptoms, it was concluded that average residual urine was insignificantly higher in patients with mild symptoms after three months, while, in patients, relative to moderate and severe symptoms after three-month therapy, it was lower (p=ns), but not statistically significantly.

#### DIGITO-RECTAL EXAMINATION OF PROSTATE (RT) AFTER 3 MONTHS AT THE FIRST CHECKUP IN RELATION TO THE BEGINNING OF THE TRIALS

Distribution of patients according to prostate volume after three months\*

Prostate volume/RT	Number	Share (%)
Prostate volume of 16-20 gr	10	14.3%
Prostate volume of 30-40gr	31	44.3%
Prostate volume of over 40gr	29	41.4%
Total	70	100.0%





## \*- Prostate volume is a subjective finding

Distribution of patients according to prostate volume after three months\*

Prostate of a volume of 16-20 gr was found in 14.3% of patients, the biggest number had prostate of a volume of 30-40gr, which had 44.3% of patients, while prostate of a volume of 40 gr, had 41.4% of patients.

There was statistically significantly the biggest number of patients with prostate of over 30-40 grams, by  $\chi 2=11.51$ , p<0.003.

Out of a total of 70 patients, after 3 months of treatment, in 8 patients, both at the beginning and after 3 months, prostate volume was of 16-30 grams, while, in two patients, prostate volume reduced from a volume of 30-40gr to a volume of 16-20 gr. In 23 of them, both at the beginning and after 3 months, prostate volume was 30-40 grams. In 29 patients, both at the beginning and after 3 months, volume was over 40 grams and, in 8 patients, prostate volume was reduced from a volume of over 40 grams to a volume of 30-40gr.

#### GLYCEMIA IN PATIENTS WITH DIABETES MELLITUS AFTER 3 MONTHS AT THE FIRST CHECKUP IN RELATION TO THE BEGINNING OF THE TRIALS

Average values of glycemia after three months of treatment in relation to DM

Clinical Trial of the Preparation Conprosta



	Numb	Average	C D	5D 95% CI Min		Mox		
	er	value	SD	Lower	Upper	Min.	Max.	
Without								
DM	65	5.37	0.76	5.18	5.55	4.00	7.30	
DM	5	7.94	3.14	4.04	11.84	5.00	13.20	
Total	70	5.55	1.25	5.25	5.85	4.00	13.20	

Average level of glycemia in patients without DM, after three months of treatment, on an average was  $5.37 \pm 0.76$ , with the minimum value of glycemia of **?** and maximum value of glycemia of 7.3.

Average level of glycemia in patients with DM, after three months of treatment, on an average was  $7.94 \pm 3.14$ , with the minimum value of 5 and maximum one of 13.2.

#### TOTAL PSA AND FREE/TOTAL PSA AFTER 3 MONTHS AT THE FIRST CHECKUP IN RELATION TO THE BEGINNING OF THE TRIALS

Average value of PSA - comparison between the beginning and 3 months

Paired T test			Average	SD	sign
	Beginnin	Total PSA at the			
Total	g	beginning	3.24	1.45	
PSA	3 months	Total PSA 3m	2.87	1.41	0.000
	Beginnin				
	g	FREE/TOTAL PSA	0.21	0.05	
F/T PSA	3 months	FREE/TOTAL PSA	0.19	0.06	0.050

Average value of Total PSA in patients, after 3 months of therapy, on an average was  $3.24 \pm 1.45$ .

Average value of Total PSA in patients, after 3 months of therapy, on an average was  $2.87 \pm 1.41$ .

By comparing values of Total PSA calculated at the beginning of the study, prior to the therapy, with values of Total PSA at the first checkup after 3 months of therapy, it was concluded that the level of Total PSA was statistically significantly lower after 3 months of administering the therapy (p<0.0001).

Average value of Free/Total PSA in patients, at the beginning of the study, prior to the therapy, on an average had been  $0.21 \pm 0.05$ .



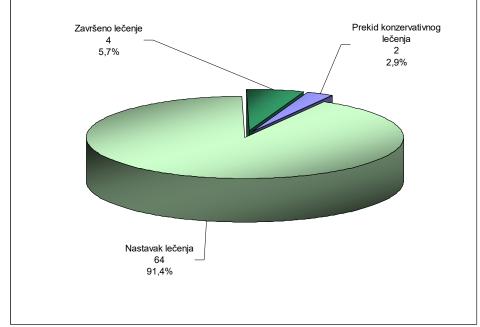
Average value of Free/Total PSA in patients, at the first checkup after 3 months of therapy, on an average was  $0.19 \pm 0.06$ .

By comparing values of Free/Total PSA at the beginning of the study, prior to the therapy, with values of Free/Total PSA at the first checkup after 3 months of therapy, it was concluded that the level of Free/Total PSA was statistically significantly lower at the first checkup after three months of administering the therapy (p<0.050).

THE SECOND CHECKUP AFTER SIX MONTHS

#### IPSS SCORE, QUALITY OF LIFE, AND SEVERITY OF SYMPTOMS AFTER 6 MONTHS AT THE SECOND CHECKUP IN RELATION TO THE FIRST CHECKUP

Out of 70 patients, after the second checkup after six months, 64 (91.4%) patients proceeded with the treatment.



Distribution of patients after the second checkup after 6 months

Four (5.7%) patients ended the treatment while, after this checkup, two patients (2.9%) stopped with conservative treatment and went for surgical treatment.



Average IPSS symptom score, at the first checkup, after 3 months, had ranged from 2 to 25 and, on an average it had been  $13.53 \pm 5.06$  and, after 6 months, it ranged from 2 to 23 and, on an average it was  $10.39 \pm 5.50.4$ .

Comparison of the level of average IPSS in relation to severity of symptoms after six months in relation to three months

		Average		
Student's T test	No.	value	SD	T test
IPSS (6 months)	70	13.53	5.06	
IPSS (12 months)	64	10.39	5.50	0.0001

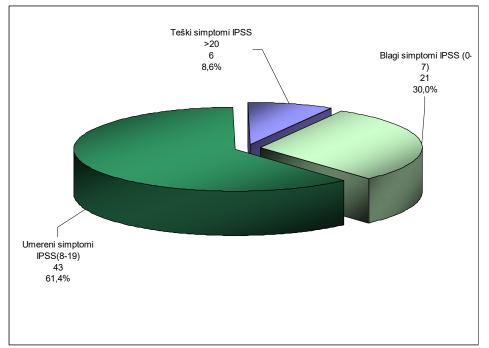
By testing values of IPSS score by paired Student's T test at the first checkup in relation to IPSS score at the second checkup, in 70 patients, it was concluded that average IPSS was statistically significantly lower in patients after six months of therapy (p<0.0001) in relation to the first checkup after three months of treatment.

Distribution of patients according to severity of symptoms (IPSS) after six months

	Number	Share (%)
Mild symptoms IPSS (0-7)	21	30.0%
Moderate symptoms IPSS		
(8-19)	43	61.4%
Severe symptoms IPSS >20	6	8.6%
Total	70	100.0%

Distribution of 70 patients, prior to interruption of drug treatment of 6 patients, according to severity of symptoms (IPSS), after six months of treatment, IPSS score of 0-7, or the group of patients with mild symptoms, accounted for 21 (30%) patients, the group with moderate symptoms, or IPSS of 8-19, accounted for 43 (61.4%) patients, and the group with severe symptoms, or IPSS from 20 and over, accounted for 6 (8.6%) patients.





Distribution of patients according to severity of symptoms (IPSS)

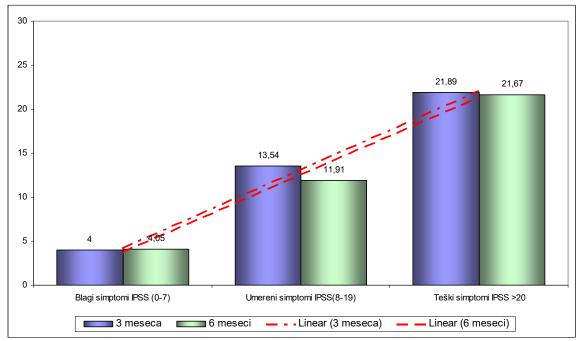
There was statistically significantly the biggest number of patients with moderate symptoms (75.7% of those treated), by  $\chi 2=101.686 \text{ p}<0.0001$ .

Prior to interruption of the therapy for six patients, there had been 70 patients, and their IPSS was as follows:

Average IPSS in relation to severity of symptoms after six months in relation to three months

IPSS	Ν	Average	SD	95% CI		Min.	Max.	
		value		Lower	Upper			
Mild symptoms IPSS (0-7)	21	4.05	1.60	3.32	4.77	2.00	7.00	
Moderate symptoms IPSS(8-19)	43	11.91	2.78	11.05	12.76	8.00	19.00	
Severe symptoms IPSS >20	6	21.67	1.21	20.40	22.94	20.00	23.00	
Total	70	10.39	5.50	9.07	11.70	2.00	23.00	

Average IPSS symptom score, after 6 months of treatment, on an average was  $4.05\pm1.6$  in patients with mild symptoms. Average IPSS symptom score in patients with moderate symptoms was  $11.91\pm2.78$  and, in patients with severe symptoms, IPSS was  $21.67\pm1.21$ .



Average IPSS in relation to severity of symptoms after six months in relation to three months

# Comparison of the level of average IPSS in relation to severity of symptoms after six months in relation to three months

Severity of symptoms IPSS	Checkup	Average	SD	Univariate 4- factor analysis
Mild symptoms	3 months	4.70	1.83	
IPSS (0-7)	6 months	4.05	1.60	
Moderate	3 months	13.86	2.71	
symptoms IPSS (8-19)	6 months	11.91	2.78	F=3.657,
Severe symptoms	3 months	22.25	2.38	p<0.011
IPSS >20	6 months	21.67	1.21	
Tatal	3 months	13.53	5.06	
Total	6 months	10.39	5.50	

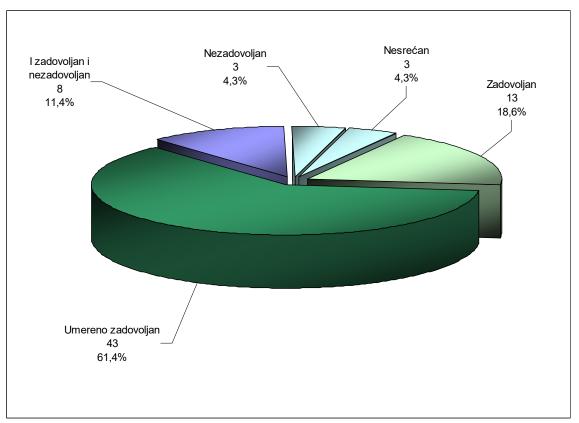
By testing values of IPSS score using univariate analysis at the first checkup in relation to IPSS score at the second checkup, in relation to severity of symptoms in patients, it was concluded that average IPSS was statistically significantly lower in patients in relation to severity of symptoms after sixmonth therapy (p < 0.011).

Distribution of patients according to assessment of quality of life after six months

Quality of life	Number	%	
Satisfied (1)	13	18.6%	
Moderately satisfied (2)	43	61.4%	
Both satisfied and dissatisfied (3)	8	11.4%	
Dissatisfied (4)	3	4.3%	
Miserable (5)	3	4.3%	
Total	70	100.0%	

After 6 months of treatment, there were no more desperate patients, who had assessed the quality of life with mark 6, nor enthusiastic, who had assessed the quality of life with mark ?.





Distribution of patients according to assessment of quality of life after six months

After 6 months of treatment, there were significantly more patients with the assessment of the quality of life – moderately satisfied (61.4%) and this share significantly grew from the first checkup after 3 months of treatment.

The assessment of "Both satisfied and dissatisfied" was given, after 3 months, by 27% of those treated, and their share dropped down to 11.4%, who upgraded the assessment of the quality of their life by the therapy.

With the assessment of the quality of life with "Satisfied", there were 18.6% of them, who assessed the quality of their life after 6 months, and this assessment after 3 months had a share of 13.5%.

There were no enthusiastic patients after 6 months, and there were three "Dissatisfied" and "Miserable" (4.3%) each, which are at the same time significantly the most seldom assessments of the quality of life after 6 months of treatment, by  $\chi 2=80.00$ , p<0.0001.



Assessment of quality of life at the second checkup after six months in relation to three months – the first checkup

	Numb er Min.		Percentiles			
		Min.	Max	25 <sup>th</sup>	50 <sup>th</sup> Median	75 <sup>th</sup>
3 months / Quality of life	74	0	5	2	2	3
6 months / Quality of life	70	1	5	2	2	2

#### Testing median by Z test

	Quality of life			
Z	-6.942			
Asymp. Sig. (2-tailed) Wilcoxon Signed Ranks Test	0.001			

Median of the quality of life in 76 patients, at the beginning of the study, had been 3, or "Both satisfied and dissatisfied". Patients assessed the quality of life, after 3 months of treatment, with marks from 0 to 5. Median of the quality of life in 74 patients, after 3 months, had been 2, or "Moderately satisfied". Patients assessed the quality of life, after 6 months of treatment, with marks from 1 to 5. Median of the quality of life in 70 patients, after 6 months, was 2, or "Moderately satisfied".

Median of assessment of the quality of life, after six months of treatment, was statistically significantly higher (p<0.001).

#### SYMPTOMS AND LIBIDO AFTER 6 MONTHS AT THE SECOND CHECKUP IN RELATION TO THE FIRST CHECKUP

The most common symptom that the patients had, at the beginning of the study, was nocturia, which had 56 (73.7%) patients, nocturia, labored daytime urination, which had 9 (11.8%) patients, nocturia, feeling of pain and urinary retention, which had 6 (7.9%) patients, and pain, weakened urine stream and enuresis, which had 5 (6.6%) patients.

The most common symptoms the patients had, after three months of treatment, were improved urination, without nocturia, frequent in daytime, which had 45 (64.3%) patients, frequent but without labor, improved libido, which had 10 (14.3%) patients, easy urination, pain reduced, but reduced stream, which had 5 (7.1%) patients, and improved urination with reduced frequency, which had 10 (14.3%) patients.



Distribution of patients according to the type of symptoms after six months in relation to three months

	Number	Share (%)
Improved urination, without nocturia,		
frequent in daytime	22	31.4%
Frequent but without labor, improved libido	6	8.6%
Easy urination, pain reduced, stream		
weakened	13	18.6%
Reduced frequency	29	41.4%
Total	70	100.0%

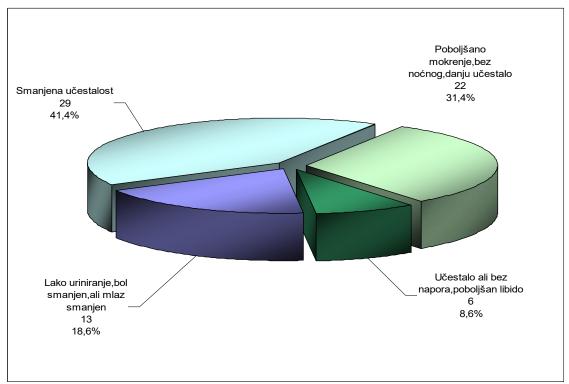
The most common symptoms the patients had, after six months of treatment, were improved urination, without nocturia, frequent in daytime, which had 22 (31.4%) patients or around 35% less in the total number than after three months.

Frequent but without labor, improved libido, which had 6 (8.6%) patients, easy urination, pain reduced, but stream weakened, which had 13 (18.6%) patients, or around 10% more in the total number than after three months.

Improved urination with reduced frequency, which had 29 (41.4%) patients, or around 25% more in the total number than after three months.



Clinical Trial of the Preparation Conprosta



Distribution of patients according to the type of symptoms after six months at the second checkup

Symptoms statistically significantly changed at the second checkup in relation to the beginning of treatment, and at the first checkup after 3 months (p<0.001). There were more significantly frequent patients who, after 6 months of treatment, had improved urination with reduced frequency.

#### ULTRASOUND DIAGNOSTICS AFTER 6 MONTHS AT THE SECOND CHECKUP IN RELATION TO THE FIRST CHECKUP

Average prostate volume, after 6 months of treatment, on an average was  $28.07\pm8.32$ , with the minimum prostate volume of 16 and maximum prostate volume of 44.

Average prostate volume and residual urine – US examination after six

monuns							
	Average	SD	Minimu	Maximum			
	value		m				
Prostate volume/US	28.07	8.32	15.00	44.00			
Residual urine /US	26.43	15.42	0.00	78.00			



Average residual urine, after 6 months of treatment, was  $26.43\pm15.42$ , with the maximum residual urine of 78.

		Average	SD	T test	
Pair 1	Prostate volume/3m	29.56	8.56	T test=3.861	
	Prostate volume/6m	28.07	8.32	p<0.0003	
Pair 2	Residual urine /3m	34.24	21.85	T test=5.488	
	Residual urine /6m	26.43	15.42	p<0.0001	

Paired T test after six months

By testing values of prostate volume by paired T test at the first checkup in relation to prostate volume at the second checkup after 6 months, it was concluded that average prostate volume was statistically significantly lower in patients after six months of therapy (p<0.0003).

By testing values of residual urine by paired T test at the first checkup in relation to residual urine after 6 months, it was concluded that average residual urine was statistically significantly lower in patients between two checkups, after three in relation to the checkup after six months of therapy (p<0.0001).

Average values of US findings of prostate volume and residual urine after six
months in relation to severity of symptoms

		Average	SD	95%	6 CI	Min.	Max.
		value	50	Upper	Lower	™1111.	I¶dX.
	Mild symptoms IPSS (0- 7)	28.90	7.47	25.50	32.30	16.00	43.00
Prostat e	Moderate symptoms IPSS (8-19)	27.44	8.62	24.79	30.09	16.00	41.00
volume	Severe symptoms IPSS >20	29.67	9.91	19.26	40.07	16.00	44.00
	Total	28.07	8.32	26.09	30.05	16.00	44.00
	Mild symptoms IPSS (0- 7)	16.05	10.34	11.34	20.76	0.00	31.00
Residu al urine	Moderate symptoms IPSS (8-19)	31.03	15.23	25.87	36.18	6.00	78.00
aiuiiie	Severe symptoms IPSS >20	35.17	14.16	20.30	50.03	11.00	46.00
	Total	26.43	15.42	22.54	30.31	0.00	78.00

Average prostate volume in patients with mild symptoms on an average was  $28.9\pm7.47$ , in patients with moderate symptoms, average prostate volume



was 27.44  $\pm$ 8.62 and, in patients with severe symptoms, average prostate volume was 29.67  $\pm$ 9.91.

Average residual urine in patients with mild symptoms on an average was  $16.05\pm10.34$ , in patients with moderate symptoms, average residual urine was  $31.03\pm15.23$  and, in patients with severe symptoms, average residual urine was  $35.14\pm14.16$ .

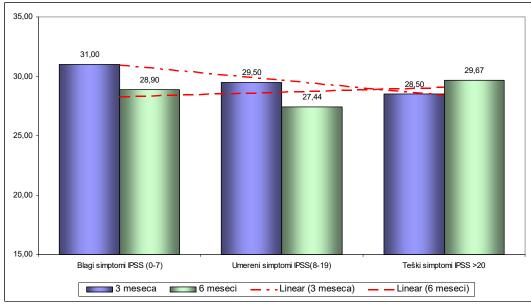
There was no significant difference either in average size of prostate volume or in average level of residual urine in relation to severity of symptoms after 6 months of treatment (p=ns).

By testing values of prostate volume using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in relation to severity of symptoms, it was concluded that average prostate volume was lower in patients in relation to severity of symptoms after six months of therapy (p=ns), but not statistically significantly.

symptoms after three in relation to 6 months							
Severity of symptoms IPSS/Prostate volume	Checkup	Avera ge	SD	Univariate 4- factor analysis			
Mild symptoms	3 months	31.00	7.48				
IPSS (0-7)	6 months	28.90	7.47				
Moderate	3 months	29.50	8.72				
symptoms IPSS (8- 19)	6 months	27.44	8.62	F=0.221, p=0.814			
Severe symptoms	3 months	28.50	9.29	p=0.014			
IPSS >20	6 months	29.67	9.91				
Total	3 months	29.56	8.56				
IULAI	6 months	28.07	8.32				

Comparison of the level of average prostate volume in relation to severity of symptoms after three in relation to 6 months



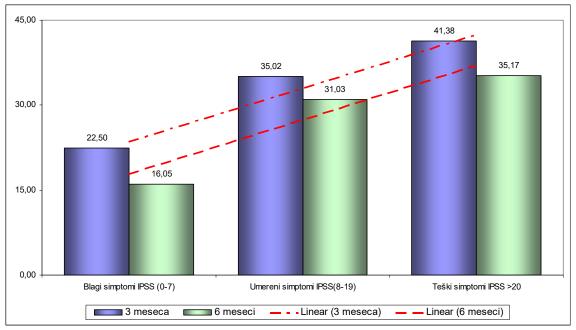


Comparison of the level of average prostate volume in relation to severity of symptoms after three in relation to 6 months

Comparison of the level of average residual urine in relation to severity of symptoms after three in relation to 6 months

Severity of symptoms IPSS/res. urine	Checkup	Avera ge	SD	Univariate 4- factor analysis
Mild symptoms	3 months	22.50	10.46	
IPSS (0-7)	6 months	16.05	10.34	
Moderate	3 months	35.02	22.98	
symptoms IPSS (8- 19)	6 months	31.03	15.23	F=3.027, p<0.013
Severe symptoms	3 months	41.38	20.69	p<0.013
IPSS >20	6 months	35.17	14.16	
Total	3 months	34.24	21.85	
Total	6 months	26.43	15.42	





Comparison of the level of average residual urine in relation to severity of symptoms after three in relation to 6 months

By testing values of residual urine using univariate analysis at the first checkup in relation to IPSS score after 6 months of treatment, in relation to severity of symptoms in patients, it was concluded that average residual urine was significantly lower in patients with mild symptoms after 6 months, as well as in patients with moderate and severe symptoms after six months of therapy (p<0.013), statistically significantly lower in relation to the first checkup after 3 months of treatment.

## DIGITO-RECTAL EXAMINATION OF PROSTATE (RT) AFTER 6 MONTHS AT THE SECOND CHECKUP IN RELATION TO THE FIRST CHECKUP

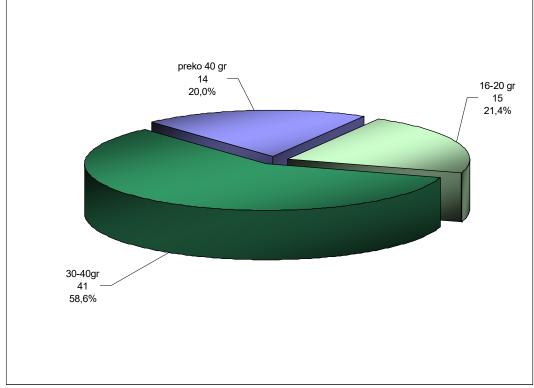
Prostate of a volume of 16-20 gr had 21.4% of patients, which is by 6% more than at the first checkup when there had been 14.3% of patients. The biggest number had prostate of a volume of 30-40gr, specifically 58.6%, which is 14% more than after 3 months, when there were 44.3% of patients with prostate of volume of 30-40gr, while prostate of a volume of 40 gr had 20 %, which is significantly lower than after 3 months, when there were 41.4% of patients (p<0.01).

Distribution of patients according to prostate volume after six months\*



Prostate volume/RT	Nu mb er	Share (%)
Prostate volume of 16-20 gr	15	21.4%
Prostate volume of 30-40gr	41	58.6%
Prostate volume over 40gr	14	20.0%
Total	70	100.0%

\*- Prostate volume is a subjective finding



Distribution of patients according to prostate volume after six months\*

There was statistically significantly the biggest number of patients with prostate of over 30-40 grams, by  $\chi 2=20.08$ , p<0.0001.

Out of a total of 70 patients, after 3 months of treatment, in 8 patients, both at the beginning and after 3 months, prostate volume was 16-30 grams, while, in two patients, prostate volume was reduced from a volume of 30-40gr to a volume of 16-20 gr. In 23, both at the beginning and after 3 months, prostate volume was 30-40 grams. In 29 patients, both at the beginning and after 3 months, volume was over 40 grams and, in 8 patients,



prostate volume was reduced from a volume of over 40 grams to a volume of 30-40gr.

## GLYCEMIA IN PATIENTS WITH DIABETES MELLITUS AFTER 6 MONTHS AT THE SECOND CHECKUP IN RELATION TO THE FIRST CHECKUP

Average values of glycemia after six months of treatment in relation to DM

	Numb	Average	SD	95% CI		Min.	Max.	
	er	value	עכ	Lower	Upper	I*III1.	Max.	
Without								
DM	65	5.37	0.70	5.20	5.54	4.00	7.00	
DM	5	7.42	2.97	3.73	11.11	5.00	12.60	
Total	70	5.52	1.12	5.25	5.78	4.00	12.60	

Average level of glycemia in patients without DM, after six months of treatment, on an average was  $5.37 \pm 0.70$ , with the minimum value of 4 and maximum one of 7.0.

Average level of glycemia in patients with DM, after six months of treatment, on an average was  $7.42 \pm 2.97$ , with the minimum value of 4 and maximum one of 12.6.

## TOTAL PSA AND FREE/TOTAL PSA AFTER 6 MONTHS AT THE SECOND CHECKUP IN RELATION TO THE FIRST CHECKUP

			Avera			
Paired T test			ge	SD	sign	
Total	3 m	Total PSA 3 m	2.87	1.41		
PSA	6 m	Total PSA - 6m	2.61	1.37	0.000	
		FREE/TOTAL PSA 3				
	3 m	m	0.19	0.06		
F/T PSA		FREE/TOTAL PSA 6				
PSA	6 m	m	0.14	0.04	0.000	

Average values of PSA - comparison between 3 and 6 months

Average value of Total PSA in patients, after 3 months of therapy, on an average was  $2.87 \pm 1.41$ .

Average value of Total PSA in patients, after 6 months of therapy, on an average was  $2.61 \pm 1.37$ .

By comparing values of Total PSA at the first checkup after 3 months of therapy with values of Total PSA at the second checkup after 6 months of therapy, it was concluded that the level of Total PSA was statistically significantly lower after 6 months (p<0.0001).



Average value of Free/Total PSA in patients, after 6 months of therapy, on an average was  $0.19 \pm 0.06$ .

Average value of Free/Total PSA in patients, after 12 months of therapy, on an average was  $0.14 \pm 0.04$ .

By comparing values of Free/Total PSA at the first checkup after 3 months of therapy with values of Free/Total PSA at the second checkup after 6 months of therapy, it was concluded that the level of Free/Total PSA was statistically significantly lower at the second checkup after 6 months (p<0.0001).

# THE LAST CHECKUP AFTER TWELVE MONTHS

#### IPSS SCORE, QUALITY OF LIFE, AND SEVERITY OF SYMPTOMS AFTER 6 MONTHS IN RELATION TO THE LAST CHECKUP AFTER 12 MONTHS

Out of 70 patients, at the beginning of treatment, in the sixth month, after checkup after six months ended, 64 (91.4%) patients finished the treatment and, therefore, in the analysis after 12 months of treatment, 64 patients were analyzed.

Average IPSS symptom score, at the last checkup, after 12 months, ranged from 1 to 12, and on an average it was  $5.30 \pm 3.22$ .

Comparison of the level of average IPSS in relation to severity of symptoms after twelve months in relation to six months

Student's T test	No	Average	SD	Ttoot
Student's T test	No.	value	SD	T test
IPSS (6 months)	64	9.27	4.46	
IPSS (12 months)	64	5.30	3.22	0,0001

By testing values of IPSS score by paired Student's T test, at the last checkup after 12 months in relation to IPSS score at the second checkup, in 64 patients, it was concluded that average IPSS was statistically significantly lower in patients after 12 months of therapy (p<0.0001) in relation to the second checkup after six months of treatment.

Distribution of patients according to severity of symptoms (IPSS) after twelve months in relation to six months

Number Share

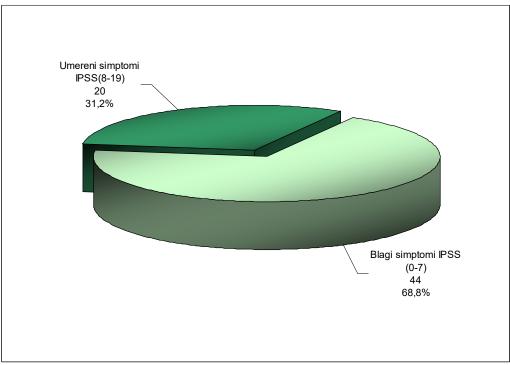


		(%)
Mild symptoms IPSS (0-7)	44	68.8%
Moderate symptoms IPSS		
(8-19)	20	31.2%
Severe symptoms IPSS >20	0	0.0%
Total	64	100.0%

Distribution of patients according to severity of symptoms (IPSS) after 12 months

IPSS score of 0-7, or the group of patients with mild symptoms, accounted for 44 (68.8%) patients, the group with moderate symptoms, or IPSS of 8-19, accounted for 20 (31.2%) patients, and in the group with severe symptoms, or IPSS of 20 and over, there were no patients.

Six patients with severe symptoms stopped drug treatment and those patients were referred to surgical treatment.



Distribution of patients according to severity of symptoms (IPSS) after twelve months in relation to six months

There was statistically significantly the biggest number of patients with mild symptoms (69.8% of those treated), by  $\chi 2=9.00 \text{ p}<0.003$ .

Average IPSS in relation to severity of symptoms after twelve months



IPSS	Ν	Average	SD	95% CI		Min.	Max.	]
		value		Lower	Upper			
Mild symptoms								
IPSS (0-7)	44	3.52	1.89	2.95	4.10	1	7	
Moderate								
symptoms								
IPSS (8-19)	20	9.45	1.19	8.83	10.01	8	12	
Total	64	5.30	3.22	4.49	6.11	1	12	

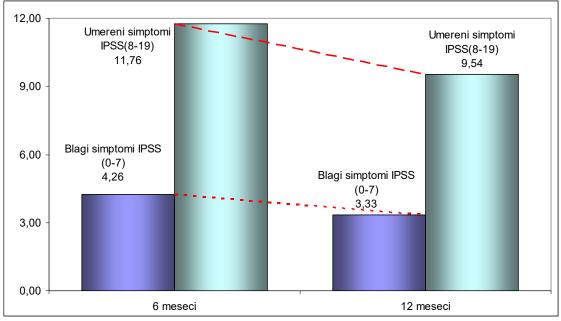
Average IPSS symptom score, after 12 months of treatment, on an average was  $3.52 \pm 1.89$  or, in patients with moderate symptoms, it was  $9.42 \pm 1.22$ .

Comparison of the level of average IPSS in relation to severity of symptoms after twelve months in relation to six months

Severity of symptoms IPSS	Checkup	Avera ge	SD	Univariate 4- factor analysis
Mild symptoms	6 months	4.26	1.68	
IPSS (0-7)	12 months	3.33	1.80	
Moderate	6 months	11.76	2.82	F=6.097,
symptoms IPSS(8-19)	12 months	9.54	1.27	p<0.0001
Total	6 months	10.23	5.40	
TOLAT	12 months	4.85	3.18	

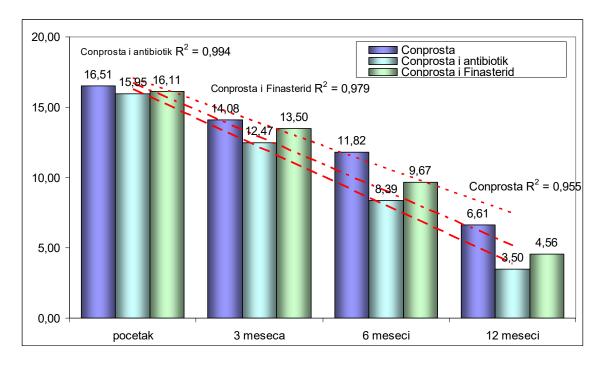
By testing values of IPSS score using univariate analysis at the last checkup in relation to IPSS score at the second checkup, in relation to severity of symptoms in patients, it was concluded that average IPSS was statistically significantly lower in patients in relation to severity of symptoms after completion of twelve-month therapy in relation to the checkup after six months (p<0.0001).





Average IPSS in relation to severity of symptoms after twelve months in relation to six months

The graph below shows average values of IPSS score in relation to the type of therapy and checkups. The biggest drop of IPSS score had patients with therapy with Conprosta and antibiotic (from 15.95 at the beginning to on an average 3.5 IPSS score at the end of the study).





Comparison of the level of average IPSS in relation to therapy in the course of 12 months

Patients with the therapy with Conprosta had statistically significant fall (from 16.51 at the beginning, to on an average 6.61 IPSS score at the end of the study).

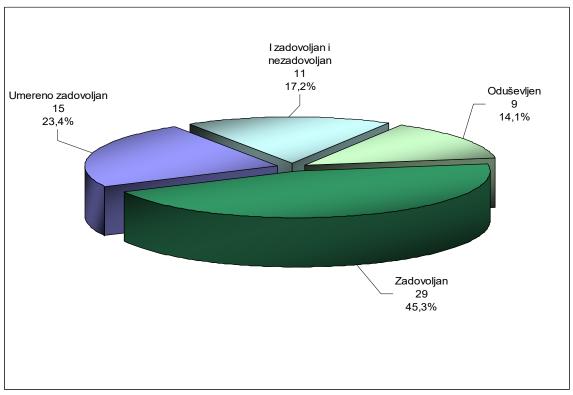
Patients with the therapy with Conprosta and Finesterid had statistically significant drop (from 16.11 at the beginning to on an average 4.56 IPSS score at the end of the study).

Distribution of patients according to assessment of quality of life after twelve months

Quality of life	Number	%	
Enthusiastic (0)	9	14.1%	
Satisfied (1)	29	45.3%	
Moderately satisfied (2)	15	23.4%	
Both satisfied and dissatisfied (3)	11	17.2%	
Total	64	100.0%	

After 12 months of treatment, there were no more desperate patients, who assessed the quality of life with mark 6, nor those, who assessed the quality of life with mark: dissatisfied or miserable.





Distribution of patients according to assessment of quality of life after twelve months

After 12 months of treatment, there were significantly more patients with the assessment of the quality of life: satisfied (there were 45.3% of them) or with the share of 13.5%; after 3 months, the share of these patients grew to 18.6%, who assessed the quality of their life after 6 months and this number increased 2.5 times.

After 12 months of treatment, moderately satisfied were 23.4 %, which was around 2.5 times less than at the checkup after 6 months (61.4%).

Both those satisfied and dissatisfied, who, after 3 months, numbered 27% of those treated, dropped by 10% and after 12 months, there were 17.2% of them.

There were 14.1% of enthusiastic patients after 12 months and this assessment is at the same time the rarest one, by  $\chi 2=15.25$ , p<0.002.

Assessment of quality of life at the last checkup after twelve months in relation to six months



	Numb			Р	Percentiles		
	er	Min.	Max	25 <sup>th</sup>	50 <sup>th</sup> Median	75 <sup>th</sup>	
6 months / Quality of life	70	1	5	2	2	2	
12 months / Quality of							
life	64	0	2	0	1	2	

#### Testing median by Z test

	Quality of life
Z	-5.965
Asymp. Sig. (2-tailed) Wilcoxon Signed Ranks Test	0.001

Median of quality of life in 76 patients, at the beginning of the study, was 3, or "Both satisfied and dissatisfied". Patients assessed the quality of life, after 3 months of treatment, with marks from 0 to 5. Median of the quality of life in 74 patients, after 3 months, was 2, or "Moderately satisfied". Patients assessed the quality of life, after 6 months of treatment, with marks from 1 to 5. Median of the quality of life in 70 patients, after 6 months, was 2, or "Moderately satisfied". Patients assessed the quality of life in 70 patients, after 6 months, was 2, or "Moderately satisfied". Patients assessed the quality of life in 70 patients, after 12 months of treatment, with marks from 0 to 2. Median of the quality of life in 63 patients, after 12 months, was 1, or "Satisfied".

Median of assessment of the quality of life, after 12 months of treatment, was statistically significantly higher (p<0.001).

#### SYMPTOMS AND LIBIDO AFTER 6 MONTHS IN RELATION TO THE LAST CHECKUP AFTER 12 MONTHS

The most common symptom that the patients had, at the beginning of the study, was nocturia, which had 56 (73.7%) patients, nocturia, labored daytime urination, which had 9 (11.8%) patients, nocturia, feelings of pain and urinary retention, which had 6 (7.9%) patients, and pain, weakened urine stream and enuresis, which had 5 (6.6%) patients.

The most common symptoms the patients had, after three months of treatment, were improved urination, without nocturia, frequent in daytime, which had 45 (64.3%) patients, frequent but without labor, improved libido, which had 10 (14.3%) patients, easy urination, pain reduced, but stream still reduced, which had 5 (7.1%) patients, and improved urination with reduced frequency, which had 10 (14.3%) patients.



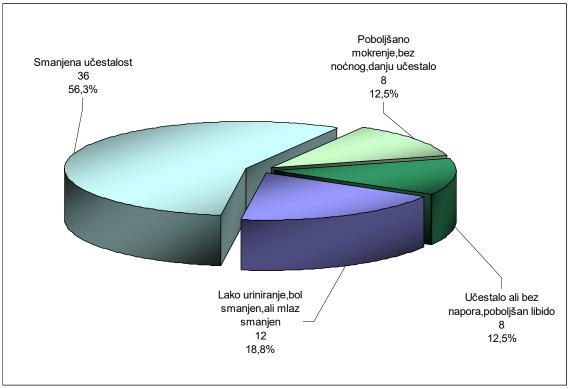
Distribution of patients according to the type of symptoms after twelve
months

	Number	Share (%)
Improved urination, without nocturia,		
frequent in daytime	8	22.2%
Frequent but without labor, improved libido	8	12.5%
Easy urination, pain reduced, stream		
reduced	12	18.8%
Improved urination with reduced frequency	36	56.3%
Total	64	100.0%

The most common symptoms the patients had, after six months of treatment, were improved urination, without nocturia, frequent in daytime, which had 22 (31.4%) patients or around 35% less in the total number than after three months, frequent but without labor, improved libido, which had 6 (8.6%) patients, easy urination, pain reduced, but stream still reduced, which had 13 (18.6%) patients, or around 10% more in the total number than after three months, and improved urination with reduced frequency, which had 29 (41.4%) patients, or around 25% more in the total number than after three months.

The most common symptoms the patients had, after 12 months of treatment, were improved urination, without nocturia, frequent in daytime, which had 8 (12.5%) patients or around 12% less in the total number than after 6 months, frequent but without labor, improved libido, which had 8 (12.5%) patients, or around 4% more than after 6 months, easy urination, pain reduced, but stream still reduced, which had 12 (18.8%) patients, and improved urination with reduced frequency, which had 36 (56.3%) patients, or around 15% more in the total number than at the checkup after 6 months.





Distribution of patients according to the type of symptoms after twelve months in relation to six months

Symptoms statistically significantly changed at the last checkup in relation to the beginning of treatment, at the first checkup, after 3 months, as well as after 6 months (p<0.001). There were significantly more frequent patients, who had, after 12 months of treatment, improved urination with reduced frequency.

## ULTRASOUND DIAGNOSTICS AFTER 6 MONTHS IN RELATION TO THE LAST CHECKUP AFTER 12 MONTHS

Average prostate volume, after 12 months of treatment, on an average was  $28.60\pm6.29$ , with the minimum prostate volume of 16 and maximum prostate volume of 39.

Average prostate volume and residual urine – US examination after twelve months in relation to six months

	Average value	SD	Minimu	Maximum	
			m		
Prostate volume/US	23.60	6.29	16.00	38.00	
Residual urine /US	18.27	12.46	0.00	42.00	

Average residual urine, at the beginning of the treatment, was  $18.27 \pm 12.46$ , with the maximum residual urine of 42.

		Average	SD	T test	
Pair 1	Prostate volume/6m	28.14	8.10	T test=6.569	
	Prostate volume/12m	23.60	6.29	p<0.0001	
Pair 2	Residual urine /6m	25.51	15.37	T test=5.166	
	Residual urine /12m	18.27	12.46	p<0.0001	

Paired T test after twelve months

By testing values of prostate volume by paired T test at the last checkup in relation to prostate volume at the second checkup after 6 months, it was concluded that average prostate volume was statistically significantly lower in patients after 12-month therapy (p<0.0001).

By testing values of residual urine by paired T test at the last checkup in relation to residual urine after 6 months, it was concluded that average residual urine was statistically significantly lower in patients between two checkups, after 12 in relation to the checkup after six months of therapy (p<0.0001).

Average values of US findings of prostate volume and residual urine after twelve months in relation to severity of symptoms

				95%	∕₀ CI		
		Average value	SD	Lowe r	Upper	Min.	Max.
Prostat	Mild symptoms IPSS (0-7)	23.80	5.63	22.08	25.51	14.00	35
е	Moderate symptoms IPSS (8-19)	23.16	7.76	19.42	26.90	14.00	38
volume	Total	23.60	6.29	22.02	25.19	14.00	38
	Mild symptoms IPSS (0-7)	16.24	12.51	12.29	20.19	0.00	42
Residu	Moderate symptoms IPSS (8-19)	22.89	11.35	17.24	28.54	7.00	41
al urine	Total	18.27	12.46	15.02	21.52	0.00	42

Average prostate volume in patients with mild symptoms on an average was  $23.80\pm5.63$ , in patients with moderate symptoms, average prostate volume was  $23.16\pm7.76$ .

Average residual urine in patients with mild symptoms on an average was 16.24±12.51, in patients with moderate symptoms, average residual urine was 22.89±11.35.



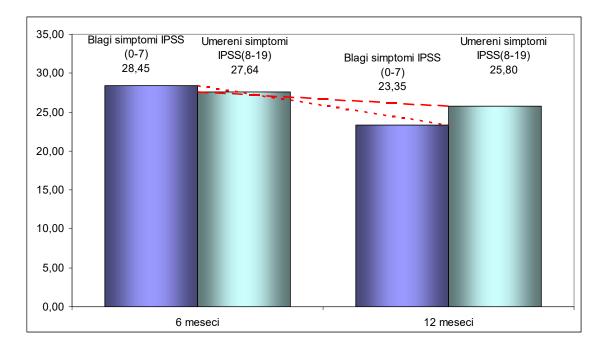
There were no significant differences either in average size of prostate volume (p=ns), or in average level of residual urine (p=ns) in relation to severity of symptoms after 12 months of treatment.

By testing values of prostate volume using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in relation to severity of symptoms in patients, it was concluded that average prostate volume was lower in patients in relation to severity of symptoms after sixmonth therapy (p=ns), but not statistically significantly.

Comparison of the level of average prostate volume in relation to severity of symptoms after three in relation to 6 months

Severity of symptoms IPSS/Prostate volume	Checkup	Average	SD	Univariate 4- factor analysis
Mild symptoms	6 months	28.45	7.59	
IPSS (0-7)	12 months	23.35	6.54	
Moderate	6 months	27.64	8.62	F=1.359,
symptoms IPSS (8-19)	12 months	25.80	5.61	p=0.253
Total	6 months	28.07	8.32	
TULAI	12 months	23.87	6.37	





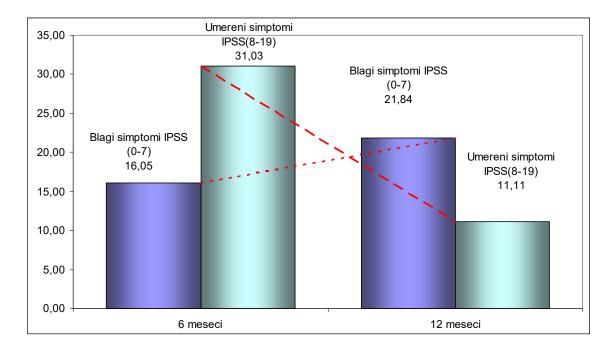
Comparison of the level of average prostate volume in relation to severity of symptoms after twelve months in relation to six months

Comparison of the level of average residual urine in relation to severity of symptoms after twelve months in relation to six months

Severity of symptoms IPSS/res. urine	Checkup	Average	SD	Univariate 4- factor analysis
Mild symptoms	6 months	16.05	10.34	
IPSS (0-7)	12 months	21.84	13.08	
Moderate	6 months	31.03	15.23	F=1.124,
symptoms IPSS (8- 19)	12 months	11.11	10.47	p=0.349
Total	6 months	26.43	15.42	
TULAI	12 months	19.74	13.23	

By testing values of residual urine using univariate analysis at the last checkup after 12 months of treatment in relation to IPSS score after 6 months of treatment, it was concluded that average residual urine was somewhat higher in patients with mild symptoms (p=ns), but not statistically significantly.





Comparison of the level of average residual urine in relation to severity of symptoms after twelve months in relation to six months

By testing values of residual urine using univariate analysis at the last checkup after 12 months of treatment in relation to IPSS score after 6 months of treatment, in relation to severity of symptoms in patients, it was concluded that average residual urine was lower in patients with moderate symptoms (p=ns), but not statistically significantly.

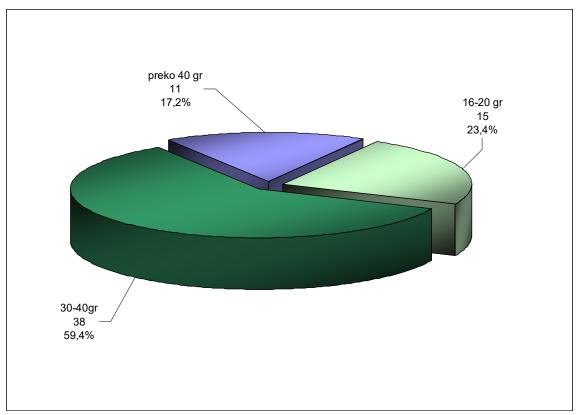
## DIGITO-RECTAL EXAMINATION OF PROSTATE (RT) AFTER 6 MONTHS IN RELATION TO THE LAST CHECKUP AFTER 12 MONTHS

Distribution of patients according to prostate volume after twelve months\*

Prostate volume/RT	Number	Share (%)
Prostate volume of 16-20 gr	15	23.4%
Prostate volume of 30-40gr	38	59.4%
Prostate volume of over 40gr	11	17.2%
Total	64	100.0%

\*- Prostate volume is a subjective finding





Distribution of patients according to prostate volume after twelve months\*

Prostate of a volume of 16-20 gr had 23.4% of patients, which was by 2% more than at the second checkup when there were 21.4% of patients. The biggest number had prostate of a volume of 30-40gr, specifically 59.4%, which was by 14% more than after 3 months when there were 44.3% of patients with prostate of a volume of 30-40gr, while prostate of a volume of 40 gr had 17.2%, which was lower than after 3 months, when there were 41.4% of patients, as well as after 6 months, when there were 20% of patients.

There was statistically significantly the biggest number of patients with prostate of over 30-40 grams, by  $\chi 2=19.906$ , p<0.0001.

Out of a total of 64 patients, after 12 months of treatment, in 13 patients the prostate volume remained unchanged and ranged around 16-20 grams while, in two patients, the prostate volume was reduced from a volume of 30-40gr to a volume of 16-20 gr. In 35 of them, even after 12 months, prostate volume was from 30 to 40 grams. In 10 patients, even after 12 months, volume was over 40 grams, and, in 1 patient, prostate volume was reduced from a volume of over 40 grams to a volume of 30-40 gr.



#### GLYCEMIA IN PATIENTS WITH DIABETES MELLITUS AFTER 6 MONTHS IN RELATION TO THE LAST CHECKUP AFTER 12 MONTHS

Average level of glycemia in patients without DM, after 12 months of treatment, on an average was  $5.36 \pm 0.75$ , with the minimum value of 4.10 and maximum one of 7.50.

Average values of glycemia after twelve months of treatment in relation to DM

	Number	Average	SD	95%	6 CI	Min	Мах
	Number	value	50	Lower	Upper	Min.	Max.
Without							
DM	59	5.36	0.75	5.16	5.57	4.10	7.50
DM	5	7.52	4.15	2.37	12.67	5.10	14.90
Total	64	5.54	1.43	5.18	5.91	4.10	14.90

Average level of glycemia in patients with DM, after 12 months of treatment, on an average was  $7.52 \pm 4.15$ , with the minimum value of 5.1 and maximum one of 14.9.

## TOTAL PSA AND FREE/TOTAL PSA AFTER 6 MONTHS IN RELATION TO THE LAST CHECKUP AFTER 12 MONTHS

Average values of PSA- comparison between 6 and 12 months

	Pair	Average	SD	sign	
	6 months	Total PSA 6m	2.55	1.30	
Total	12				
PSA	months	Total PSA -12	2.25	1.33	0.020
	6 months	FREE/TOTAL PSA	0.14	0.04	
	12				
F/T PSA	months	FREE/TOTAL PSA	0.13	0.03	0.022

Average value of Total PSA in patients, after 6 months of therapy, on an average was  $2.55 \pm 1.30$ .



Average value of Total PSA in patients, after 12 months of therapy, on an average was  $2.25 \pm 1.33$ .

By comparing values of Total PSA at the second checkup after 6 months of therapy with values of Total PSA at the last checkup after 12 months of therapy, it was concluded that the Total PSA level was statistically significantly lower (p<0.020).

Average value of Free/Total PSA in patients, after 6 months of therapy, on an average was  $0.14 \pm 0.04$ .

Average value of Free/Total PSA in patients, after 12 months of therapy, on an average was  $0.13 \pm 0.03$ .

By comparing values of Free/Total PSA at the second checkup after 6 months of therapy with values of Free/Total PSA at the last checkup after 12 months of therapy, it was concluded that the Free/Total PSA level was statistically significantly lower (p<0.022).

## COMPARISON OF CHARACTERISTICS OF PATIENTS AT THE BEGINNING AND AFTER TWELVE MONTHS

#### IPSS SCORE, QUALITY OF LIFE, AND SEVERITY OF SYMPTOMS AT THE BEGINNING IN RELATION TO THE CHECKUP AFTER 12 MONTHS

Out of 76 patients, after 12 months, treatment ended 64 (84.2%) patients. One (1.3%) patient got allergy and stopped treatment after 3 months, and one (1.3%) went for surgical treatment. Four (5.2%) patients ended treatment after 6 months while, after the second checkup, six patients (7.9%) stopped drug treatment and went for surgical treatment.

Average IPSS symptom score at the last checkup, after 12 months, ranged from 1 to 12 and, on an average, it was  $5.30 \pm 3.22$ . In those 64 patients, IPSS at the beginning was  $16.13\pm4.65$ .

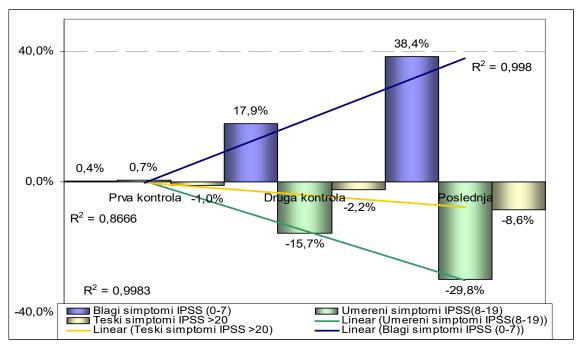
Comparison of the level of average IPSS in relation to severity of symptoms after twelve months in relation to six months

		Average		
Student's T test	No.	value	SD	T test
IPSS at the beginning	64	16.13	4.65	0.0001



IPSS (12 months)	64	5.30	3.22	
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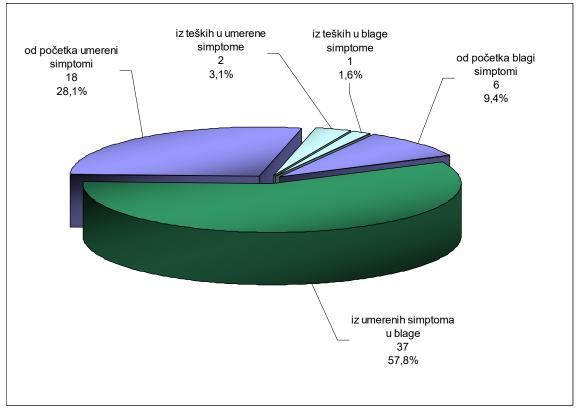
By testing values of IPSS score by paired Student's T test at the last checkup after 12 months in relation to IPSS score at the beginning, in 64 patients, who were on therapy throughout all the 12 months, it was concluded that average IPSS was statistically significantly lower in patients after 12 months of therapy (p<0.0001) in relation to the beginning of therapy.



Change of the share of patients according to severity of symptoms (IPSS) in the course of twelve months of monitoring

In the course of 12 months, from checkup to checkup, the number of patients with mild symptoms grew by 38.4 %. The number of patients with moderate symptoms (29.8%) and with severe symptoms (8.6%) dropped in the course of 12 months, from checkup to checkup.





Change of the share of patients according to severity of symptoms (IPSS) after twelve months in relation to the beginning

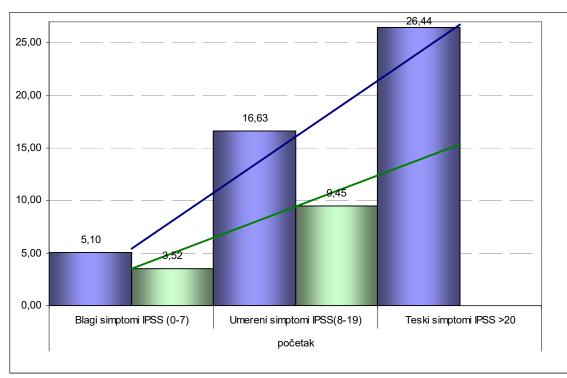
Distribution of patients according to severity of symptoms (IPSS) after 12 months in relation to the beginning, in 64 patients, who were treated in the course of all 12 months, was as follows:

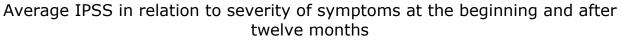
- IPSS score of 0-7, or the group of patients with mild symptoms, accounted for 44 patients, out of whom 6 (9.4%) patients had mild symptoms from the beginning of the study, as well as 37 (57.8%) patients, who initially had moderate symptoms, and one (1.6%) patient initially had severe symptoms.
- IPSS score of 8-19, or the group with moderate symptoms, accounted for 20 (31.2%) patients, out of whom 18 (28.1%) had moderate symptoms and 2 (3.1%) had had initially severe symptoms.
- And there was no group with severe symptoms IPSS of 20 and over.

There was statistically significantly the biggest number of patients who, after 12 months of monitoring, had come with moderate symptoms and ended treatment with mild symptoms, by p < 0.01.

	Beginning		12 months						
Severity of symptoms		Aver		Num	Avera				
IPSS	Number	age	SD	ber	ge	SD	AN <mark>C</mark> OVA		
Mild symptoms IPSS(0-			1.3			1.8			
7)	10	5.10	7	44	3.52	9			
Moderate symptoms		16.6	2.4			1.1	F=37.496		
IPSS	57	3	8	20	9.45	9	p<0.000		
Severe symptoms IPSS		26.4	2.5						
>20	9	4	5	No pa	tients wi	th IPS	SS over 20		

Average IPSS in relation to severity of symptoms at the beginning and after twelve months

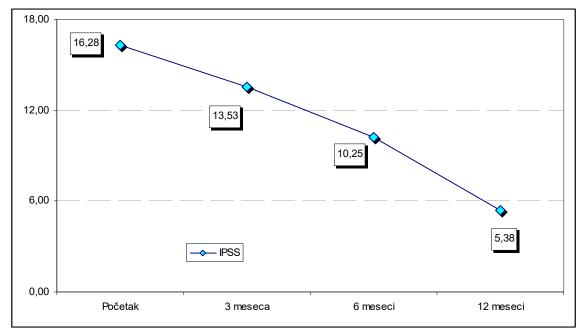




Average IPSS symptom score, after 12 months of treatment, on an average was  $3.52 \pm 1.89$  in patients with mild symptoms and was significantly lower than the average at the beginning, (p<0.001), when it had been  $5.1\pm1.37$ .

Average IPSS symptom score, after 12 months of treatment, in patients with moderate symptoms was  $9.42 \pm 1.22$  and it was significantly lower than the average at the beginning, when it had been  $16.63\pm2.48$  (p<0.0001).

By testing values of IPSS score using univariate analysis at the last checkup in relation to IPSS score at the beginning, in relation to severity of symptoms in patients, it was concluded that average IPSS was statistically significantly lower in patients in relation to severity of symptoms after completion of twelve-month therapy in relation to the beginning of the study (p<0.0001).



Average IPSS at the beginning and in the course of twelve months

Patients with the therapy with Conprosta and mild symptoms had a drop in IPSS score (from 4.2 at the beginning, to IPSS score of 3.35 at the end of the study).

Patients with the therapy with Conprosta and antibiotic and mild symptoms had a drop in IPSS score (from 5.67 at the beginning, to 4.13 at the end of the study), but not statistically significant.

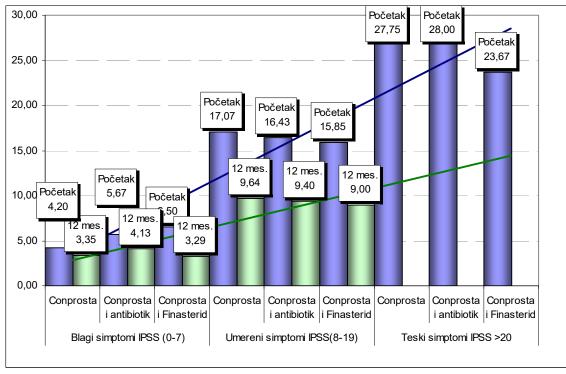
Patients with the therapy with Conprosta and Finesterid and mild symptoms had statistically significant drop in IPSS score (from 6.5 at the beginning to 3.29 at the end of the study).



Coverity of		Begin	ining	12 moi	nths	
Severity of symptoms IPSS	Therapy	Avera ge	SD	Averag e	SD	ANCOVA
	Conprosta	4.20	0.84	3.35	1.79	p=ns
Mild symptoms	Conprosta and antibiotic	5.67	1.53	4.13	1.81	p=ns
IPSS (0-7)	Conprosta and Finasterid	6.50	0.71	3.29	2.13	p<0.05
	Conprosta	17.07	2.39	9.64	1.29	p<0.01
Moderate symptoms IPSS	Conprosta and antibiotic	16.43	1.91	9.40	1.14	p<0.01
(8-19)	Conprosta and Finasterid	15.85	3.13	9.00	1.15	p<0.01
	Conprosta	27.75	2.22			
Severe symptoms IPSS >20	Conprosta and antibiotic Conprosta	28.00	0.00	No patients		ents
	and Finasterid	23.67	1.15			

## Average IPSS in relation to severity of symptoms and therapy at the beginning and after twelve months





Average IPSS in relation to severity of symptoms and therapy at the beginning and after twelve months

Patients with the therapy with Conprosta and moderate symptoms had statistically significant drop in IPSS score (from 17.07 at the beginning, to IPSS score 9.64 at the end of the study).

Patients with the therapy with Conprosta and antibiotic and moderate symptoms had statistically significant drop in IPSS score (from 16.43 at the beginning, to 9.4 at the end of the study).

Patients with the therapy with Conprosta and Finesterid had statistically significant drop in IPSS score (from 15.85 at the beginning to 9.00 at the end of the study).

After 12 months of treatment, with the assessment of the quality of life: enthusiastic, there were 14.1% of patients, and their number, from the beginning of the study, was 33% of satisfied, 55.6% of moderately satisfied, and 11% of dissatisfied.

After 12 months of treatment, patients with the assessment of the quality of life: enthusiastic (there were 9 of them, or 14.1%) and their number, from

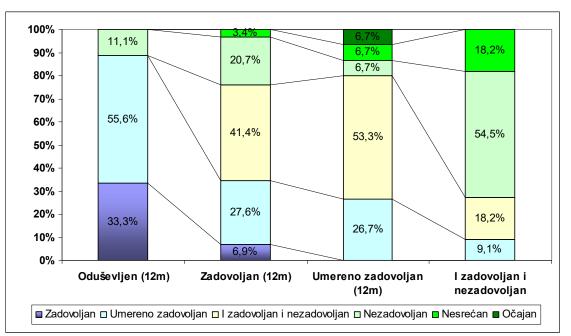


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the beginning of the study, was 33.3% of satisfied, 55.6% of moderately satisfied, and 11.1% of dissatisfied.

After 12 months of treatment, there were significantly more patients with the assessment of the quality of life: satisfied, 29 (45.3%), and their number, from the beginning of the study, was 6.9% of satisfied, 27.6% of moderately satisfied, 41.4% of both satisfied and dissatisfied, 20.7% of dissatisfied, and 3.4% of miserable.

After 12 months of treatment, patients with the assessment of the quality of life: moderately satisfied, 15 (23.4%), and their number, from the beginning of the study, was 26.7% of moderately satisfied, 53.3% of both satisfied and dissatisfied, 6.7% of dissatisfied, 6.7% of miserable, and 6.7% of desperate.



Change of the share according to the change of assessment of quality of life after twelve months

After 12 months of treatment, with the assessment of quality of life both satisfied and dissatisfied, there were 11 patients (17.2%), and their number was 9.1% of moderately satisfied patients from the beginning of the study, 18.2% of both satisfied and dissatisfied, 54.5% of dissatisfied, 18.2% of miserable.



# Assessment of quality of life at the last checkup after twelve months in relation to the beginning

	Min.	Max	P	ercentile	S
	1*1111.		25 <sup>th</sup>	Median	75 <sup>th</sup>
Beginning / Quality of life	1	6	2	3	4
12 months / Quality of					
life	0	2	0	1	2

#### Testing median by Z test

	Quality of life
Z	-7.998
Asymp. Sig. (2-tailed) Wilcoxon Signed Ranks	0.0001

Median of the quality of life in 76 patients, at the beginning of the study, was 3, or "Both satisfied and dissatisfied". Median of the quality of life in 63 patients, after 12 months, was 1, or "Satisfied".

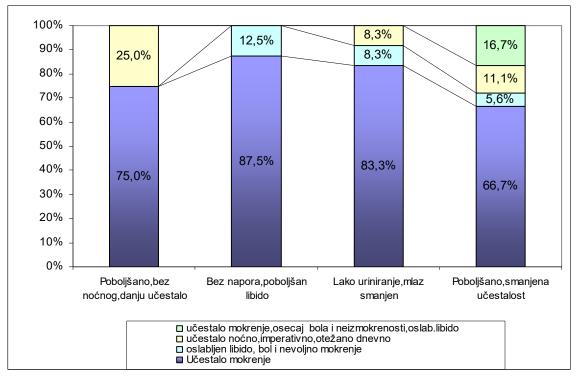
Median of assessment of the quality of life, after 12 months of treatment, was statistically significantly higher (p<0.001).

#### SYMPTOMS AND LIBIDO AFTER 12 MONTHS IN RELATION TO THE BEGINNING OF THE STUDY

The most common symptom the patients had, at the beginning of the study, was nocturia, which had 56 (73.7%) patients, while nocturia, labored daytime urination, which had 9 (11.8%) patients, and as symptoms, nocturia, feeling of pain, and urinary retention, which had 6 (7.9%) patients, while pain, weakened libido and urine stream and enuresis had 5 (6.6%) patients.

After 12 months of treatment, in patients, urination was improved, without nocturia, frequent in daytime, which had 8 (12.5%) patients, frequent but without labor, improved libido was established in 8 (12.5%) patients, easy urination, pain reduced, but stream still reduced, which had 12 (18.8%) patients, and improved urination with reduced frequency, which had 36 (56.3%) patients. The graph shows change of original symptoms at the beginning of the study, as well as the share in changed and mitigated symptoms after 12 months of treatment.





Symptoms at the last checkup after twelve months in relation to symptoms at the beginning of trials

Symptoms of frequent urination were mitigated, and frequency was reduced in 66.7%, frequent urination, feeling of pain and urinary retention, weakened libido were improved, and urination frequency was reduced in 16.7% of patients, nocturia, imperative, labored daytime urination was improved and urination frequency reduced in 11.1% and, weakened libido, pain, and enuresis was improved, and urination frequency reduced in 5.6% of patients.

In 10 (15.62%) patients, libido was improved after 12 months. In 3 (4.7%), weakened libido was, at the beginning of the study until the end, after 12 months normalized, while 20 (31.3%) patients did not have libido even by the end of the study, same as at the beginning of the study, and 10 (15.62%) patients had weakened libido up to the end of the study.

Symptoms of decreased libido were mitigated, and frequency of urination, pain on urination was reduced after 12 months of therapy. Symptoms statistically significantly changed at the last checkup in relation to the beginning of treatment (p<0.001).



There were significantly more frequent patients who, after 12 months of treatment, had improved urination with reduced frequency, as well as reduced pain.

## ULTRASOUND DIAGNOSTICS AFTER 12 MONTHS IN RELATION TO THE BEGINNING OF THE STUDY

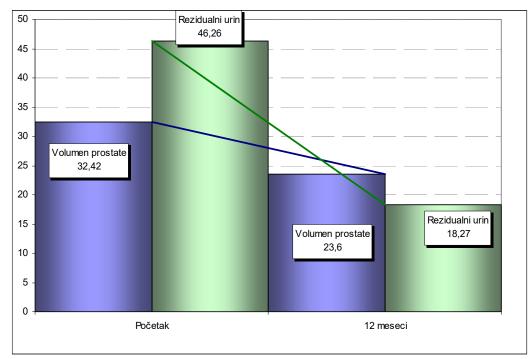
Average prostate volume and residual urine – US examination after twelve months in relation to the beginning

		Average	SD	T test					
Pair 1	Prostate volume/Beginning	32.42	9.20	T test=11.02					
	Prostate volume/12m	23.60	6.29	p<0.0001					
Pair 2	Residual urine / Beginning	46.26	24.48	T test=10.77					
	Residual urine /12m	18.27	12.46	p<0.0001					

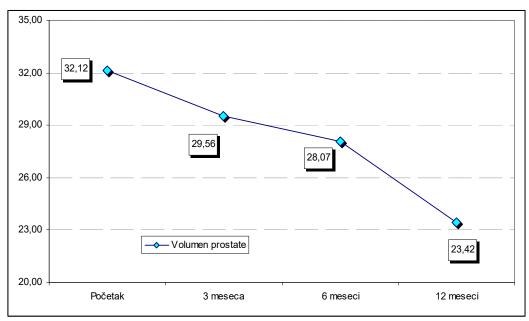
By testing values of prostate volume by paired T test at the last checkup in patients who were monitored up to the end, in relation to prostate volume at the beginning of the study, it was concluded that prostate volume was statistically significantly lower after 12-month therapy (p<0.0001).

By testing values of residual urine by paired T test at the last checkup in relation to residual urine at the beginning of the study, it was concluded that average residual urine was statistically significantly lower in patients between two checkups, after 12 in relation to the beginning of the therapy (p<0.0001).

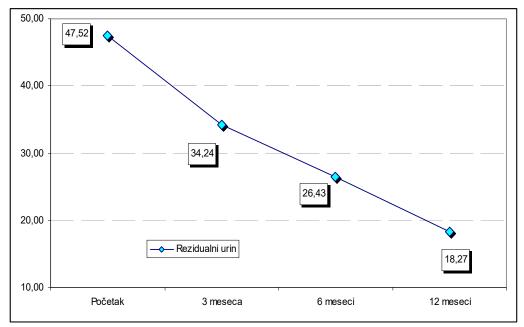




Average prostate volume and residual urine – US examination after twelve months in relation to the beginning



Average prostate volume in the course of twelve months in relation to the beginning



Average residual urine in the course of twelve months in relation to the beginning

After 12 months, volume of prostate was significantly reduced same as residual urine was significantly reduced.

## DIGITO-RECTAL EXAMINATION OF PROSTATE (RT) AFTER 12 MONTHS IN RELATION TO THE BEGINNING OF THE STUDY

Prostate volume\* remained the same in 34 (53.12%) of those treated after 12 months while, in 30 (46.87%) of those treated, after 12 months, prostate was reduced.

\*- Prostate volume is a subjective finding

#### GLYCEMIA IN PATIENTS WITH DIABETES MELLITUS AFTER 12 MONTHS IN RELATION TO THE BEGINNING OF THE STUDY

Average values of glycemia at the beginning of the study and after 12 months in relation to DM

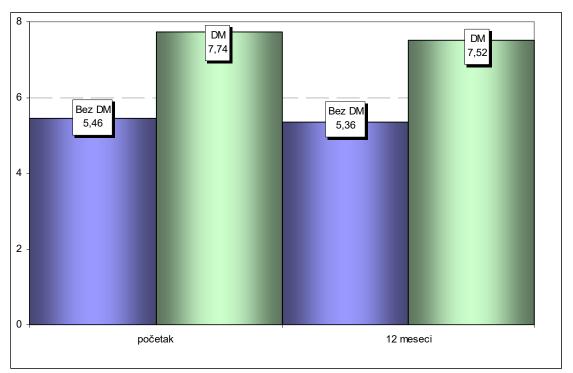
	Beginning			12 months			
	Numb	Average	SD	Numbe	Average	SD	
	er	value	50	r	value	30	
Without	71	5.46	0.92				
DM	/1	5.10	0.52	59	5.36	0.75	
DM	5	7.74	4.09	5	7.52	4.15	

Average level of glycemia in patients without DM, at the beginning of treatment, on an average was  $5.46 \pm 0.92$ , with the minimum value of 3.7 and maximum one of 9.

Average level of glycemia in patients without DM, after 12 months of treatment, on an average was  $5.36 \pm 0.75$ , with the minimum value of 4.10 and maximum one of 7.50.

Average level of glycemia in patients with DM, at the beginning of treatment, on an average was  $7.74 \pm 4.09$ , with the minimum value of 3.3 and maximum one of 12.9.

Average level of glycemia in patients with DM, after 12 months of treatment, on an average was  $7.52 \pm 4.15$ , with the minimum value of 5.1 and maximum one of 14.9.



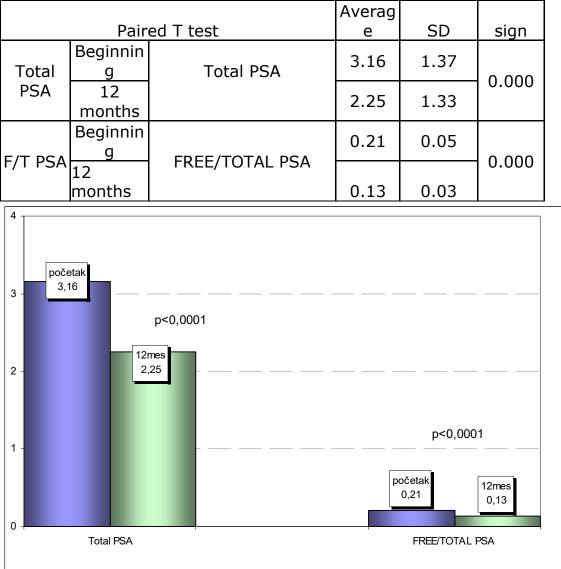
Average values of glycemia at the beginning of the study and after 12 months in relation to DM



There was no statistically significant difference in patients according to the level of glycemia at the beginning in relation to 12 months of treatment (p=ns), same as in relation to onset of DM, (p=ns).

#### TOTAL PSA AND FREE/TOTAL PSA AFTER 12 MONTHS IN RELATION TO THE BEGINNING OF THE STUDY

Average values of PSA - comparison of values at the beginning of treatment and after 12 months



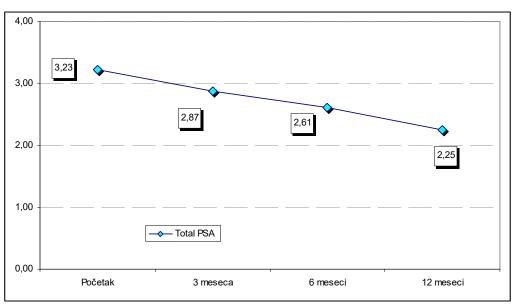
Average values of PSA - comparison of values at the beginning of treatment and after 12 months



Average value of Total PSA in patients, at the beginning of the study, prior to the therapy, on an average had been  $3.16 \pm 1.37$ .

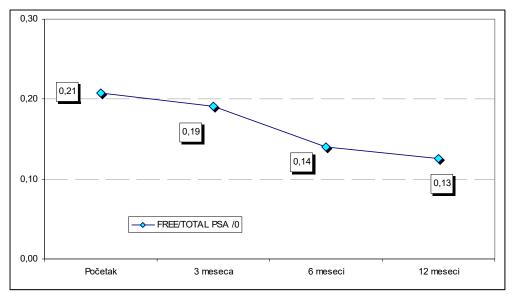
Average value of Total PSA in patients, after 12 months of therapy, on an average was  $2.25 \pm 1.33$ .

By comparing values of Total PSA at the beginning of the study prior to the therapy, with values of Total PSA at the last checkup after 12 months of therapy, it is concluded that the Total PSA level is statistically significantly lower (p<0.0001).



Average values of TOTAL PSA – in the course of 12 months





Average values of FREE/TOTAL PSA - in the course of 12 months

Average value of Free/Total PSA in patients, at the beginning of the study, prior to the therapy, on an average had been  $0.21 \pm 0.05$ .

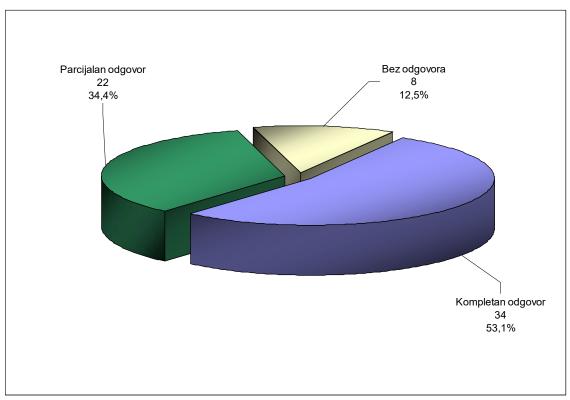
Average value of Free/Total PSA in patients, after 12 months of therapy, on an average was  $0.13 \pm 0.03$ .

By comparing values of Free/Total PSA at the beginning of the study, prior to the therapy, with values of Free/Total PSA at the last checkup after 12 months of therapy, it is concluded that the Free/Total PSA level is statistically significantly lower (p<0.0001).

#### **RESPONSE TO THERAPY AFTER 12 MONTHS OF TREATMENT**

At the end of treatment, out of 64 study subjects, complete response to therapy had 34 (53.1%) study subjects, in 22 (34.4%), response to therapy was partial, while 8 (12.5%) patients had no response to therapy.





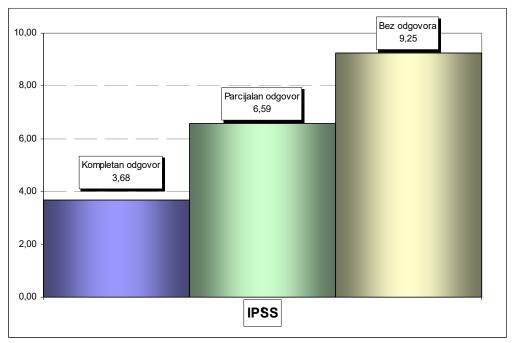
Distribution of study subjects in relation to response to therapy

Average age of patients with complete response was  $62.35 \pm 10.1$ , among patients with partial response, average age was  $66.45 \pm 11.07$  and, among patients without response to therapy, average age was  $71.00 \pm 3.54$ .

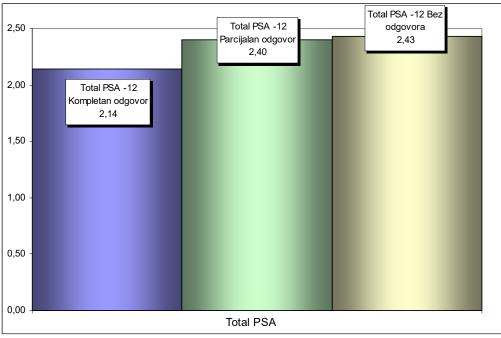
Overall efficiency rate was 66% with 95 % of CI (53%-78%).

The graphs that follow show average values of IPSS score, Total PSA, and Free/Total PSA index in relation to response to therapy after 12 months of the study.





Average values of IPSS score in relation to response to therapy

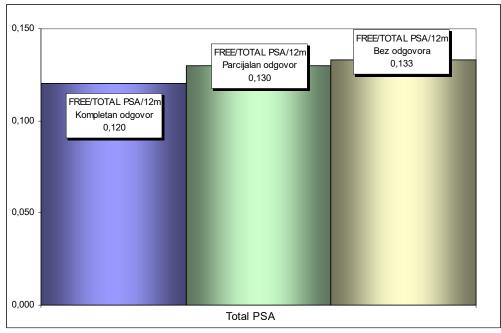


Average values of Total PSA in relation to response to therapy

\***Complete response** - Generally mild symptoms, quality of life – enthusiastic to moderately satisfied, FREE/TOTAL PSA below 0.12, most common symptoms: improved urination, libido, reduced frequency, prostate size often up to 30 gr.

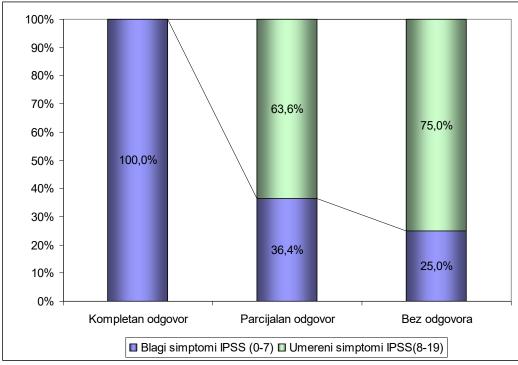
\* **Partial response** - Often with moderate symptoms, quality of life – from satisfied to neither satisfied nor dissatisfied, FREE/TOTAL PSA on an average: 0.13, the most common symptoms: easy urination, reduced frequency, prostate size most frequently up to 40 gr.

\*Without response – All having moderate symptoms, quality of life – mark (3), neither satisfied nor dissatisfied, FREE/TOTAL PSA on an average over 0.13, the most common symptoms: improved urination, without nocturia, weakened libido, prostate size over 40 gr.



Average values of Free/Total PSA in relation to response to therapy

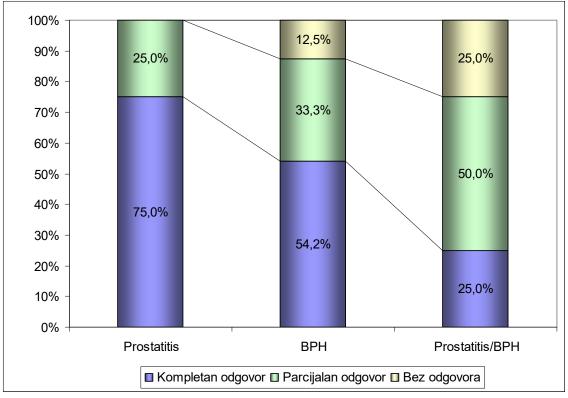




Severity of symptoms in relation to response to therapy

At the end of treatment, out of 64 study subjects, complete response to therapy had 34 (53.1%) study subjects, and out of that number, 17.6% had prostatitis, 76.5% BPH, and 5.9 % of patients had both Prostatitis and BPH.





Distribution of study subjects in relation to diagnosis and response to therapy

In relation to the observed diagnosis, out of a total of 8 study subjects with prostatitis, at the end of the treatment, complete response had 75%, partial response had 25% and, there were no patients with prostatitis without response.

In relation to the observed diagnosis, out of a total of 48 study subjects with BPH, at the end of the treatment, complete response had 54.2%, partial response had 33.3% and, there were 12.5% of patients without response.

In relation to the observed diagnosis, out of a total of 8 study subjects with prostatitis and BPH, at the end of the treatment, complete response had 25%, partial response had 50% and, 25% of patients were without response.

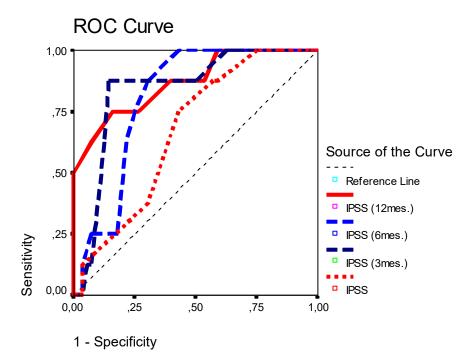
There was significantly the biggest share of patients who had complete response among patients with prostatitis (p<0.016).



# ROC CURVE - IPSS AND F/T PSA IN RELATION TO THE OUTCOME OF TREATMENT

Test Result	Area	SE	Sig.	95% CI		
Variable(s)				Lower	Upper	
IPSS	0.670	0.083	0.123	0.507	0.833	
IPSS (3 months)	0.842	0.066	0.002	0.712	0.971	
IPSS (6 months)	0.806	0.057	0.005	0.695	0.917	
IPSS (12	0.869	0.073	0.001	0.727	1.012	
months)						

Area under ROC curve IPSS in patients in relation to response to therapy



Diagonal segments are produced by ties.

Area under ROC curve for IPSS at measurements in patients without response to therapy

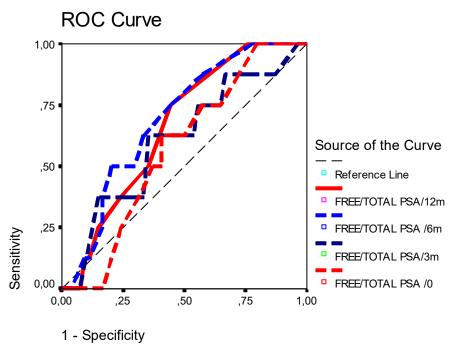
In patients <u>without response to therapy</u>, the area under ROC curve for <u>IPSS</u> <u>score</u> was statistically significant at all the measurements, except at the beginning of the study. Sensitivity of IPSS score was the highest at the last



measurement after 12 months of monitoring, in patients without response to therapy.

Area under ROC curve - Free/Total PSA in patients in relation to response to therapy

Test Result Variable(s)	Area	SE	Sig.	95% CI		
				Lower	Upper	
FREE/TOTAL PSA /0	0.573	0.087	0.508	0.402	0.744	
FREE/TOTAL PSA/3m	0.608	0.106	0.329	0.399	0.816	
FREE/TOTAL PSA /6m	0.694	0.083	0.078	0.531	0.858	
FREE/TOTAL PSA/12m	0.662	0.083	0.142	0.499	0.825	



Diagonal segments are produced by ties.

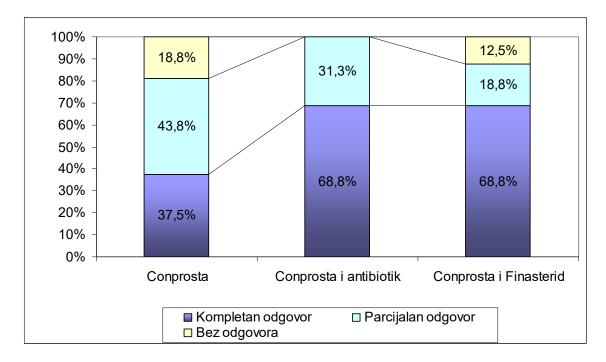
Area under ROC curve for Free/Total PSA at measurements in patients without response to therapy

In patients <u>without response to therapy</u>, the area under ROC curve for <u>FREE/TOTAL PSA</u> was statistically without significance at all the measurements.

At the checkup after 6 months, FREE/TOTAL PSA index had the highest sensitivity in patients without response to therapy.



Among patients who were administered Conprosta as therapy, there were 12 (37.5%) patients with complete response to therapy, 14 (43.8%) patients had partial response to therapy, while 6 (18.8%) study subjects were without response to therapy.



Distribution of study subjects in relation to therapy in the course of the study and in relation to the result of treatment

Among the patients, who were administered Conprosta and antibiotic as therapy, there were 11 (68.8%) patients with complete response to therapy, and 5 (31.3%) patients had partial response to therapy.

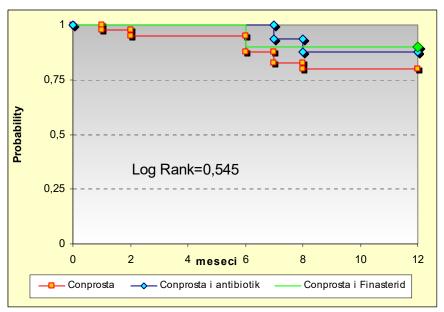
Among the patients, who were administered Conprosta and Finasterid as therapy, there were 11 (68.8%) patients with complete response to therapy, and 3 (18.8%) patients had partial response to therapy, while two (12.5%) study subjects were without response to therapy.

There were significantly more study subjects with complete response to therapy with Conprosta and antibiotic and partial response to the same therapy.



## KAPLAN-MEIER CURVE - MONITORING IN RELATION TO THE TYPE OF THERAPY

Kaplan–Meier curve shows probability of overall monitoring of patients in relation to the therapy they were administered.



Probability of overall monitoring of patients in relation to the therapy they were administered

Among the patients, who were administered Conprosta as therapy, probability of overall monitoring of patients was 76% up to the end of therapy.

Among the patients, who were administered Conprosta and antibiotic as therapy, probability of overall monitoring of patients was 82% up to the end of therapy.

Among the patients, who were administered Conprosta and Finasterid as therapy, probability of overall monitoring of patients was 83% up to the end of therapy.



There are no statistically significant differences among patients in relation to the type of drug therapy, which they were administered during the treatment and the length of monitoring in relation to response to the therapy, Log Rank test, p=0.545.

### AVERAGE PATIENT AT THE BEGINNING

He is 65 years old, with BMI 25.4, with moderate symptoms and IPSS 16.3, with mark 3 for the quality of life (neither satisfied nor dissatisfied), he has both a chronic disease and dysuric difficulties, but not positive heredity (only every third one has positive heredity) as well as two and more symptoms that take him to a doctor, of which the most common one is nocturia and, as accompanying symptoms, absence of libido as well as weakened libido. Previously, he most often had had BPH, for which he had not taken any therapy. Glycemia of this patient was 5.6, Total PSA 3.23, and F/T PSA 0.21. US of prostate volume of this patient was 32, and residual urine 47.5. At RT examination, this patient had prostate of a volume of over 40 gr. Urine finding was + and most often in urine there were some bacteria, Le + Er, and oxalates, but this patient had normal urine culture findings and normal sperm culture findings. At the beginning of the study, he was given the diagnosis BPH and he gets only Conprosta as therapy.



### **AVERAGE PATIENT AFTER 3 MONTHS**



After 3 months, this patient had moderate symptoms with IPSS on an average 13.5, with mark 2 for the quality of life (moderately satisfied), whose symptoms are becoming milder, fequency of urination and pain are reduced.

Glycemia of this patient was 5.5, Total PSA was 2.87, and F/T PSA 0.19. US of prostate volume of this patient was 29.6, and residual urine 34.3, i.e. this finding is better in relation to the beginning of the treatment but not statistically significantly. At RT examination after 3 months, this patient had prostate of a volume of 30-40gr gr. This patient often has normal findings of urine, urine culture and most often normal sperm culture findings.



### **AVERAGE PATIENT AFTER 6 MONTHS**



After 6 months of therapy, an average patient had moderate symptoms with IPSS on an average 10.3, with mark 2 for the quality of life (moderately satisfied). An average patient's symptoms are becoming milder, frequency of urination and pain are reduced, libido improved. Average glycemia of this patient was 5.51, Total PSA 2.61, and F/T PSA 0.14. US of prostate volume of this patient was 28.1, and residual urine 26.4, i.e. these findings are better in relation to 3 months of treatment statistically significantly. At RT examination after 6 months, this patient had prostate of a volume of 30-40gr gr. An average patient has most often normal findings of urine, urine culture and normal sperm culture findings.

### **AVERAGE PATIENT AFTER 12 MONTHS**



<u>After 12 months</u>, an average patient was 66 years old, he was overweight with BMI 25.6, had mild symptoms with IPSS on an average 5.38, with mark 1 for the quality of life (satisfied). An average patient's symptoms are becoming milder, frequency of urination, pain are reduced, libido improved, and daytime urination is reduced and easier.

Glycemia of the patient was 5.51, Total PSA 2.25, and F/T PSA 0.13. US of prostate volume of this patient was 23.6, and residual urine 18.7, i.e. this finding is better in relation to the previous treatment statistically significantly. At RT examination after 12 months, this patient had prostate of a volume of 30-40gr. An average patient, at the end of treatment, has normal findings of urine, urine culture and normal sperm culture findings.



## OVERVIEW OF CONCLUSIONS FOR DISCUSSION

An average patient, <u>at the beginning of the study</u>, was 65 years old, with BMI 25.4, with moderate symptoms, and IPSS 16.3, with mark 3 for the quality of life (neither satisfied nor dissatisfied), he had both a chronic disease and dysuric difficulties, but not positive heredity as well (only every third one has positive heredity) as well as two and more symptoms, which took him to a doctor, out of which the most common was nocturia and, as accompanying symptom, absence of libido as well as weakened libido. Previously, he most often had had BPH for which he had not taken any therapy.

Glycemia of this patient was 5.6, Total PSA 3.23, and F/T PSA 0.21. US of prostate volume of this patient was 32, and residual urine 47.5. At RT examination, this patient had prostate of a volume of over 40 gr. Urine finding was + and most often in urine there were some bacteria, Le + Er, and oxalates, but this patient had normal urine culture findings and normal sperm culture findings. At the beginning of the study, he was given the diagnosis BPH and he was administered only Conprosta as therapy.

There were statistically significantly more normal-weight patients (50% of those treated), as well as overweight patients (42.1%), by p<0.001. There were significantly less patients, who were in the group of those underweight (1.3%), or in the group of obese (6.6%). There was statistically significantly the biggest number of patients with moderate symptoms (75% of those treated), p<0.0001.

There were statistically significantly more patients with the assessment of the quality of life - both satisfied and dissatisfied - (28.9% of those treated), than with the assessment of the quality of life - dissatisfied - (25%), as well as with the assessment of the quality of life - moderately satisfied - (23.7%), p<0.001, while there was significantly less satisfied (11.8%) patients at the beginning of treatment.

There was statistically significantly the biggest number of patients with dysuric difficulties and with a combination of dysuric difficulties and chronic diseases (over 70% of those treated), p<0.0001. There were statistically significantly more patients without heredity (57.9% of those treated), p<0.0001 and, in 37% of the diseased, heredity was positive.

There was statistically significantly the biggest number of patients with one symptom and mild severity, or patients with two symptoms and moderate



severity, p<0.001. The most common symptom the patients had, at the beginning of the study, was nocturia, which had 56 (73.7%) patients, nocturia, labored daytime urination, which had 9 (11.8%) patients, nocturia, feeling of pain and urinary retention, which had 6 (7.9%) patients, and pain, weakened urine stream and enuresis, which had 5 (6.6%) patients.

There was statistically significantly the biggest number of patients with previous BPH, p<0.0001. There was statistically significantly the biggest number of patients with previous prostatitis, BPH and RUIC, and therapy, p<0.038.

Most patients had absence of libido as well as weakened libido, but significant difference among patients in relation to libido was not verified, p=0.354. There was statistically significantly the biggest number of patients with RT of prostate of over 40 grams, p<0.0001.

Severity of symptoms in patients, at the beginning of the study, was in correlation with prostate volume. The bigger the prostate gland, the patients were often classified in the group with higher IPSS score, or more severe symptoms.

There were statistically significantly more patients, at the beginning of the study, with positive urine findings where there were oxalates, leucocytes, erythrocytes, and some bacteria, p<0.0001, with normal urine culture and sperm culture findings.

There was statistically significantly the biggest number of patients, at the beginning of the study, with BPH, who were administered only Conprosta as therapy while, among patients with prostatitis, the most common therapy was a combination of Conprosta and antibiotic, as well as in patients with BPH and prostatitis, by p<0.0001.

Statistically significant difference among patients according to diagnosis and severity of symptoms was not verified, although there had been more patients, at the beginning of the study, with moderate mild symptoms and BPH, as well as with BPH and severe ones in relation to prostatitis and BPH. Statistically significant difference among patients according to the type of therapy and severity of symptoms was not verified, although there had been insignificantly more patients, at the beginning of the study, with moderate and mild symptoms, who were administered only Conprosta.

There was statistically significantly the biggest number of patients, at the beginning of the study, with BPH and prostatitis, with absence of libido,



p < 0.05. Statistically significant difference among patients at the beginning of the study in relation to therapy and libido was not verified.

There was statistically significantly the biggest number of patients, at the beginning of the study, with BPH and prostatitis, who had prostate of a volume of 16-20gr, p<0.011.

<u>After 3 months of therapy</u>, this patient had moderate symptoms with IPSS on an average 13.5, with 2 for the quality of life (moderately satisfied), whose symptoms become milder, frequency of urination and pain are reduced.

Glycemia of this patient was 5.5, Total PSA was 2.87, and F/T PSA 0.19.

US of prostate volume of this patient was 29.6, and residual urine 34.3, i.e. this finding is better in relation to beginning of treatment but not statistically significantly. At RT examination after 3 months, this patient had prostate of a volume of 30-40gr gr. This patient often had normal findings of urine, urine culture and most often normal sperm culture findings.

By comparing values of Total PSA calculated at the beginning of the study, prior to therapy, with values of Total PSA at the first checkup after 3 months of therapy, it was concluded that the Total PSA level was statistically significantly lower after 3 months of administering the therapy (p<0.0001), as well as by comparing values of Free/Total PSA, it was concluded that the level of Free/Total PSA was statistically significantly lower at the first checkup after three months of administering the therapy (p<0.050).

US of prostate volume of this patient was 29.6, and residual urine 34.3, i.e. this finding is better in relation to the beginning of treatment, but not statistically significantly. At RT examination after 3 months, this patient had prostate of a volume of 30-40gr, he most often had normal findings of urine, urine culture finding and normal sperm culture findings.

There was statistically significantly the biggest number of patients with moderate symptoms (75.7% of those treated), p < 0.0001.

By testing vales of IPSS score by paired Student's T test at the first checkup in relation to IPSS score at the second checkup, in 70 patients, it was concluded that average IPSS was statistically significantly lower in patients after six-month therapy (p<0.0001) in relation to the first checkup after three months of treatment.



Symptoms statistically significantly change at the second checkup in relation to the beginning of treatment, and at the first checkup after 3 months (p<0.001). There were significantly more frequent patients who, after 6 months of treatment, had improved urination with reduced frequency.

By testing values of prostate volume and residual urine by paired T test at the first checkup in relation to prostate volume at the beginning of the study, it was concluded that average prostate volume was statistically significantly lower in patients after 6-month therapy (p<0.001). In relation to severity of symptoms, only residual urine was significantly reduced, while change of prostate volume was insignificant in relation to severity of symptoms.

Median of the quality of life in 74 patients, after 3 months, was -2/"Moderately satisfied". Median of assessment of the quality of life after three months of treatment was statistically significantly higher (p<0.001).

<u>After 6 months of therapy</u>, average patient had moderate symptoms with IPSS on an average 10.3, with mark 2 for the quality of life (moderately satisfied). Average patient's symptoms became milder, frequency of urination and pain were reduced, and libido was improved. Average glycemia of this patient was 5.51, Total PSA 2.61, and F/T PSA 0.14. US of prostate volume of this patient was 28.1, and residual urine 26.4, i.e. these findings are better in relation to 3 months of treatment statistically significantly. At RT examination after 6 months, this patient had prostate of a volume of 30-40gr. An average patient most often had normal findings of urine, urine culture and normal sperm culture findings.

By comparing values of Total PSA at the first checkup after 3 months of therapy with values of Total PSA at the second checkup after 6 months of therapy, it was concluded that the level of Total PSA was statistically significantly lower after 6 months (p<0.0001), as well as for values of Free/Total PSA, it was concluded that the level of Free/Total PSA was statistically significantly lower at the second checkup after 6 months (p<0.0001).

US of prostate volume was 28.1, and residual urine 26.4, i.e. these findings are better in relation to 3 months of treatment statistically significantly. At RT examination after 6 months, this patient had prostate of a volume of 30-40gr gr.

By testing values of prostate volume and residual urine by paired T test at the first checkup in relation to prostate volume at the beginning of the study, it was concluded that prostate volume was statistically significantly lower in patients after three-month therapy (p<0.001). By testing values of



residual urine and values of prostate volume using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in relation to severity of symptoms, there was no statistical significance.

There was statistically significantly the biggest number of patients with prostate of over 30-40 grams after 3 months, p<0.003.

There were no enthusiastic patients after 6 months, and those dissatisfied and miserable were three (4.3%) each, which are, at the same time, significantly least frequent assessments of the quality of life after 6 months of treatment, p<0.0001. Median of assessment of the quality of life, after six months of treatment, was statistically significantly higher (p<0.001).

By testing values of IPSS score using univariate analysis at the first checkup in relation to IPSS score at the second checkup - 6 months, in relation to severity of symptoms in patients, it was concluded that average IPSS was statistically significantly lower in patients in relation to severity of symptoms after six-month therapy (p<0.011).

<u>After 12 months of therapy</u>, an average patient was 66 years old, he was overweight with BMI 25.6, and he had mild symptoms with IPSS on an average 5.38, with mark 1 for the quality of life (satisfied). An average patient's symptoms became milder, frequency of urination, pain were reduced, libido improved, and daytime urination was reduced and easier.

Glycemia of the patient was 5.51, Total PSA 2.25, and F/T PSA 0.13. US of prostate volume of this patient was 23.6, and residual urine 18.7, i.e. this finding is better in relation to the previous treatment statistically significantly. At RT examination after 12 months, this patient had prostate of a volume of 30-40 gr. An average patient at the end of treatment had normal findings of urine, urine culture and normal sperm culture findings.

By comparing values of Total PSA at the second checkup after 6 months of therapy with values of Total PSA at the last checkup after 12 months of therapy, it was concluded that the level of Total PSA was statistically significantly lower (p<0.020), and for Free/Total PSA, it was concluded that the level of Free/Total PSA was statistically significantly lower (p<0.022). There were statistically significantly more patients at an age of over 60, (79% of those treated), p<0.001.

By testing values of IPSS score by paired Student's T test at the first checkup in relation to IPSS score at the beginning of the study, in 74 patients, it was concluded that average IPSS was statistically significantly



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lower in patients after three-month therapy (p<0.0001). By testing values of IPSS score using univariate analysis at the first checkup in relation to IPSS score at the beginning of the study, in patients in relation to severity of symptoms, it was concluded that average IPSS was statistically significantly lower in patients in relation to severity of symptoms after three-month therapy (p<0.001).

There were statistically significantly more patients with the assessment of the quality of life – moderately satisfied (43.2%), as well as satisfied and dissatisfied - (27% of those treated), than with the assessment of the quality of life - satisfied - (13.5%), p<0.001, while there was significantly less of enthusiastic (1.4%) patients at the beginning of treatment.

After 12 months of treatment, there were significantly more patients with the assessment of the quality of life: satisfied (45.3% of them) or with the share of 13.5%; after 3 months, the share of these patients grew to 18.6%, who assessed quality of their life after 6 months, this number increased 2.5 times.

After 12 months of treatment, 23.4 % were moderately satisfied, which is around 2.5 times lower than at the checkup after 6 months (61.4%).

Both satisfied and dissatisfied, who, after 3 months, accounted for 27% of those treated, dropped by 10% and, after 12 months, there were 17.2% of them.

There were 14.1% of enthusiastic patients after 12 months and this assessment is at the same time the most seldom one, p<0.002.

There was statistically significantly the biggest number of patients with mild symptoms (69.8% of those treated), p<0.003, while there were no more patients with severe symptoms. Six <u>patients with severe symptoms stopped</u> the drug treatment and, therefore these patients proceeded with surgical treatment.

By testing values of IPSS score using univariate analysis at the last checkup in relation to IPSS score at the second checkup, in relation to severity of symptoms in patients, it was concluded that average IPSS was statistically significantly lower in patients in relation to severity of symptoms after completion of twelve-month therapy in relation to the checkup after six months (p<0.0001). By testing values of IPSS score by paired Student's T test at the last checkup after 12 months in relation to IPSS score at the second checkup, in 63 patients, it was concluded that average IPSS was statistically significantly lower in patients after 12-month therapy (p<0.0001) in relation to the second checkup after six months of treatment.



Median of assessment of the quality of life – satisfied, after 12 months of treatment, was statistically significantly higher (p<0.001).

Symptoms were statistically significantly changed at the last checkup in relation to the beginning of treatment, at the first checkup after 3 months as well as after 6 months (p<0.001). There were significantly more frequent patients, who, after 12 months of treatment, had improved urination with reduced frequency.

By testing values of prostate volume and residual urine by paired T test at the last checkup in relation to prostate volume at the second checkup after 6 months, it was concluded that average prostate volume was statistically significantly lower in patients after 12-month therapy (p<0.0001).

There was no significant difference either in average size of prostate volume (p=ns) or in average level of residual urine (p=ns), in relation to severity of symptoms after 12 months of treatment.

Out of a total of 64 patients, after 12 months of treatment, in 13 patients, after 12 months, prostate volume was still 16-20 grams while, in two patients, prostate volume was reduced from a volume of 30-40gr to a volume of 16-20 gr. In 35 of them, after 12 months, prostate volume was still 30-40 grams. In 10 patients, after 12 months, volume was still over 40 grams and, in 1 patient, prostate volume was reduced from a volume of over 40 grams to a volume of 30-40gr.

RESPONSE TO TH

At the end of the treatment, out of 64 study subjects, complete response to the therapy had 34 (53.1%) study subjects, in 22 (34.4%), response to therapy was partial while, in 8 (12.5%) patients, there was no response to therapy. Complete response had patients with generally mild symptoms, assessment of the quality of life – enthusiastic to moderately satisfied, FREE/TOTAL PSA below 0.12, most common symptoms: improved urination, libido, reduced frequency, prostate size often up to 30 gr.

Partial response had patients most often with moderate symptoms, with the assessment of the quality of life – satisfied to neither satisfied nor dissatisfied, FREE/TOTAL PSA on an average 0.13, most common symptoms: easy urination, reduced frequency, prostate size most often up to 40 gr.

Without response to therapy were all the patients with moderate symptoms, with the assessment of the quality of life – (3) neither satisfied nor dissatisfied, FREE/TOTAL PSA on an average over 0.13, the most common symptoms: improved urination, without nocturia, weakened libido, prostate size over 40 gr.



Overall efficiency rate was 66% with 95 % CI (53%-78%).

In relation to the observed diagnosis, out of a total of 8 study subjects with prostatitis, at the end of treatment, complete response had 75%, partial response had 25%, and there were no patients with prostatitis without response.

In relation to the observed diagnosis, out of a total of 48 study subjects with BPH, at the end of treatment, complete response had 54.2%, partial response had 33.3%, and there were 12.5% of patients without response.

Among the patients, who were administered Conprosta as therapy, there were 12 (37.5%) patients with complete response to therapy, 14 (43.8%) patients had partial response to therapy, while 6 (18.8%) study subjects were without response to therapy.

Among the patients, who were administered Conprosta and antibiotic as therapy, there were 11 (68.8%) patients with complete response to therapy, and 5 (31.3%) patients had partial response to therapy.

Among the patients, who were administered Conprosta and Finasterid as therapy, there were 11 (68.8%) patients with complete response to therapy, and 3 (18.8%) patients had partial response to therapy, while two (12.5%) study subjects were without response to therapy.

Significantly most often, complete response had patients with prostatitis (p<0.016).

There were significantly more study subjects with complete response and therapy with Conprosta and antibiotic and partial response with the same therapy.

There was no statistically significant difference among patients in relation to the type of drug therapy they were administered during the treatment and the length of monitoring of patients in relation to response to therapy, Log Rank test, p = 0.545.

