stromal components. Moreover, the average area of the glandular tissue was 29.9 ± 4.7 % in the central part and 32.3 ± 4.9 % in the peripheral part, connective tissue – 43.7 ± 5.5 % and 48.6 ± 5.7 %, muscles – 26.4±4.0% and 19.4 ± 3.8 % correspondingly. Comparing the obtained data with the specific tissue volume in a healthy prostate gland, we can see that under the conditions of NHPG, grows mainly the connective tissue in peripheral part; moreover, its area increases by 23.6 ± 1.3 %. The biggest changes in the structure of prostate gland were observed in persons who experienced much stress, viral infections, chronic inflammatory processes and excessive allergen challenges during their life. A similar trend was revealed during the histochemical analysis. For example, the maximal reduction of the ACC in NCP level till 0.95 ± 0.06 (normal value 1.58 ± 0.03) and its growth till 2.17 ± 0.012 in CA content (normal value 1.76 ± 0.02) were observed in patients with long-standing NHPG complicated by CP.

To sum up, the results of the conducted research prove that degree of the structural changes in prostate gland with NHPG, is considerably influenced by the level of nonspecific body resistance, and activity of sympathoadrenal system, which should be taken into account during the treatment and prevention of this pathology.

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THE HEMODYAFILTRATION IN THE ACUTE RENAL FAILURE AT THE PATIENTS’ HEMORRHAGIC FEVER WITH THE NEPHRITIC SYNDROME

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The Udmurt Republic is the natural focus and the hot spot of the haemorrhagic fever with the nephritic syndrome (HFNS). The acute renal failure (ARF), by our data, is being developed from 24 up to 49 % of the HFNS diseased persons, at the severe forms of which, side by side with the medicamental therapy, the hemodialysis is being used. In the last years, the efferent therapy new methods – such, as the hemofiltration, the hemodyafiltration (HDF) are being used for the ARF medical treatment.

The Research’s Aim

It is necessary to be given the HDF efficiency general clinical assessment with kidneys’ functional state dynamics study at the patients’ HFNS severe form, having complicated by the ARF.

The Research’s Material and Methods

The 65 HFNS diseased persons with the ARF at the age of from 19 up to 60 years, whom, the HDF was used by the indications in the «on-line plus» regime, had been made up the researched group.

So, the HDF procedures have been carried out at the 4008S devices of the «Fresenius» firm with the «Fresenius F 605» hemodyafiltration application.

The ARF clinical and the traditional biochemical parameters have already been included into the efficiency assessment. The kidneys’ function ultrasonic research with the blood circulation, the blood flow and its velocity parameters definition in the renal vessels has been carried out. The $\beta_2$ – microalbumin has already been defined in the dynamics in the blood and in the urine; the microcirculation state has been estimated.

The Received Results. The HDF medical treatment adequacy, according to the AFR usual clinical and the biochemical parameters, has already been achieved at all the patients (e.g. the urea, the creatinine, the electrolytic balance, $\beta_2$ – microalbumin, the acid – based homeostasis, the lipids peroxidation, the microcirculation indices and the others). By the renal ultrasonic research, the quite positive dynamics has been revealed. So, the before increased kidneys volume (e.g. 303,7 ± 13,2 cm$^3$–262,3 ± 8,2 cm$^3$; $p < 0,05$) the pyramids cross – section (e.g. (1,45 ± 0,04 cm$^2$–0,83 ± 0,04 cm$^2$; $p < 0,01$), the bast layer echogenicity (e.g. 27,2 ± 0,08–22,1 ± 0,6 standard units; $p < 0,01$) have been statically and significantly decreased.

The blood circulation and the blood flow, its velocity all the parameters in the kidneys have already considerably been improved (e.g. the blood flow systolic rate: 50,8 ± 2,5–58,8 ± 2,2 cm/s; $p < 0,05$; the blood flow diastolic rate: 22,1 ± 0,4–24,2 ± 0,2 cm/s; $p < 0,05$; the blood flow average rate 15,0 ± 0,5–29,4 ± 1,2 cm/s; $p < 0,01$; the blood flow volume rate 161,7 ± 8,6–216 ± 8,8; $p < 0,01$).

The Conclusions

The substitutive renal therapy carrying out at the HFNS patients with the ARF hemodyafiltration in the «on-line plus» regime is being exerted the expressed clinical effect with the quick biochemical parameters stabilization and with the kidneys’ functional state restoration.

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