

, -
 . . * , . . , . . , . .
 (-) -
 : , , - ,
 - . -
 (-)
 : , , - ,
 , - .
 ()
 25 , 1,5% ,
 8% [2, 3, 14, 16, 22]. - () .
 [5, 7, 10, 15].
 , [7, 11, 18, 22, 23].
 - “ ”
 () [4, 6, 8, 9].
 [1, 19, 21]. ()
 , “ ” ()
 [1, 2, 9, 19, 21].
 [1, 21].
 [1, 13, 17].
 , [6, 9]. ,

(),

[6, 9].

(-) [1, 9, 20].

)

[1, 12, 13],

- pe

[1, 19, 22].

(),

[1, 5, 12, 13].

[12, 13].

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- V (

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- 20

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24

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“ULTIMA PRO - 30” (“ ”,)

Ganau A. (1992).

“Peninsula Labo ato ies” ().

>100

“Roshe” ().

(1),

(7,54 ± 0,39)

-

, (12,85 ± 1,16)

-

(15,90 ± 1,56)

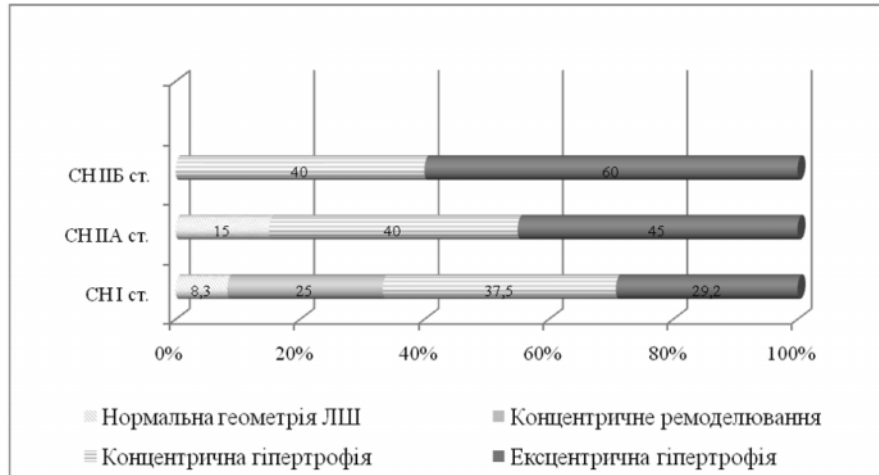
– (<0,001). 1- ,
 – 2- (<0,001 *).
 1 – –

		n=24	n=20	n=10
		%	%	%
		59,04 ± 1,92	53,85 ± 1,95	55,80 ± 2,87
		7,54 ± 0,39	12,85 ± 1,16 ^a	15,90 ± 1,56 ^b
	1	95,8	10	
	2	4,2	90 ^a	100 ^b
		100		
			35	10
			65	90
		79,2		
		20,8	40	20
			30	40
	V		30	40
		30,58 ± 0,67	34,80 ± 0,82 ^a	35,50 ± 0,96 ^b
		49,25 ± 0,92	50,95 ± 0,90	51,30 ± 1,54
		115,45 ± 4,97	124,57 ± 5,16	126,94 ± 8,66
		37,33 ± 1,72	51,01 ± 2,99 ^a	53,17 ± 3,46 ^b
		67,50 ± 1,25	59,38 ± 1,02 ^a	57,77 ± 1,38 ^b
% S, %		37,85 ± 1,01	31,77 ± 0,71 ^a	30,67 ± 0,98 ^b
, / ²		125,31 ± 4,50	135,05 ± 4,41 ^c	147,21 ± 6,17 ^b
		0,43 ± 0,01	0,43 ± 0,01	0,45 ± 0,02
		10,79 ± 0,21	11,05 ± 0,26 ^c	11,70 ± 0,37 ^b
		10,42 ± 0,20	10,60 ± 0,17 ^c	11,20 ± 0,36
: ^a – : ^c –			; ^b –	

– () (<0,001) ,
 – (30,58 ± 0,67) , (34,80 ± 0,82) (35,50 ± 0,96)
 () , (37,33 ± 1,72) , (51,01 ± 2,99)
 (53,17 ± 3,46) (<0,001).
 1,
 (): (67,50 ± 1,25)% , (59,38 ± 1,02)% –
 (57,77 ± 1,38)% – (<0,001). (S) (<0,001).
 ()
 / ² (<0,05). (147,21 ± 6,17), (135,05 ± 4,41) (125,31 ± 4,50)
 (<0,05): (11,70 ± 0,3) , (11,05 ± 0,26)
 (10,79 ± 0,21)
 () – (10,60 ± 0,17)
 (11,20 ± 0,36) (1).

(. 1),

, - , .
 , 25%
 : 29,2% - , 45% -
 60% -



1 -

, , , 2. ()
 2, (<0,05U),
 (78,21 ± 4,08) / (68,76 ± 2,86) /
 ()
 - (59,21 ± 1,90) / (65,37 ± 2,33) /
 (/) ,
 - : (1,09 ± 0,06) - , (1,27 ± 0,06) -
 (1,39 ± 0,12) - (<0,05).

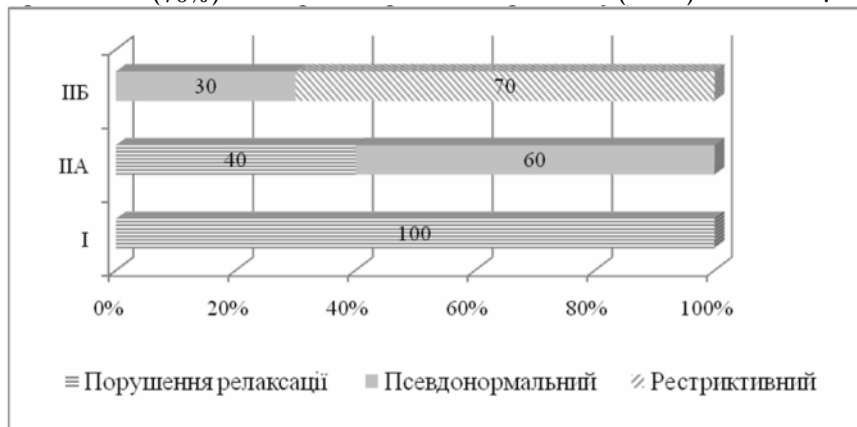
2 -

	n=24	n=20	n=10
, /	68,76 ± 2,86	78,21 ± 4,08 ^a	82,22 ± 7,87
, /	65,37 ± 2,33	61,79 ± 1,44	59,21 ± 1,90 ^b
/	1,09 ± 0,06	1,27 ± 0,06 ^a	1,39 ± 0,12 ^b
IVRT,	87,46 ± 2,90	95,55 ± 4,09 ^c	83,30 ± 4,92
DT,	226,21 ± 5,95	199,90 ± 6,99 ^a	199,20 ± 11,73 ^b

: ^a - ; ^b -
 ; ^c -

(IVRT) (95,55 ± 4,09) (83,30 ± 4,92)
 (<0,05).
 (DT),
 (199,90 ± 6,99) (199,20 ± 11,73) (226,21 ± 5,95)

40% 60% (30%)



2 –

3 –

	n=24	n=20	n=10
	%	%	%
, 10 ¹²	3,72 ± 0,06	3,14 ± 0,06 ^a	3,14 ± 0,12 ^b
, /	126,92 ± 1,10	106,40 ± 2,66 ^a	103,70 ± 4,44 ^b
	1016,33 ± 0,78	1010,40 ± 0,80 ^a	1009,10 ± 1,30 ^b
, /	0,04 ± 0,02	0,27 ± 0,10 ^a	0,92 ± 0,39 ^{bc}
, /	4,49 ± 0,17	6,49 ± 0,23 ^a	6,90 ± 0,32 ^b
, /	4,06 ± 0,08	4,87 ± 0,12 ^a	5,17 ± 0,09 ^b
, /	43,89 ± 0,43	37,06 ± 0,52 ^a	37,01 ± 0,86 ^b
, /	0,10 ± 0,01	0,27 ± 0,02 ^a	0,30 ± 0,03 ^b
, / /1,73 ²	92,67 ± 1,63	52,55 ± 5,11 ^a	44,60 ± 6,34 ^b
, /	197,75 ± 2,71	256,85 ± 7,63 ^a	311,70 ± 8,13 ^{bc}
-, /	4,04 ± 0,09	2,62 ± 0,13 ^a	2,16 ± 0,12 ^{bc}

^a – ; ^b – ; ^c –

$\pm 1,30$ (0,92 \pm 0,3) / (<0,001), (<0,01).
 (1016,33 \pm 0,78) , (1009,10 (0,04 \pm 0,02)
 : (6,49 \pm 0,23), (6,90 \pm 0,3) (4,49 \pm 0,17) / (<0,001).
 (4,06 \pm 0,08) - (5,17 \pm 0,09)
 / - (<0,001).
 : (43,89 \pm 0,43) - , (37,06 \pm 0,52) -
 (37,01 \pm 0,86) / - (<0,001).
 : (92,67 \pm 1,63) -
 (52,55 \pm 5,11) - (44,60 \pm 6,34) / /1,73² -
 (<0,001)
 3,
 (197,75 \pm 2,71) - , (256,85 \pm 7,63) - (311,70 \pm 8,13) / - (<0,001).
 [52, 73],
 (<0,001) : (4,04 \pm 0,09) -
 , (2,62 \pm 0,13) - (2,16 \pm 0,12) / -
 (, , ,).
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 I , .
 .4 ,
 4 - ,

	r = -0,50 <0,001						
	r = -0,79 <0,001	r = 0,77 <0,001					
	r = 0,17 <0,05	r = 0,04	r = -0,07				
	r = -0,41 <0,001	r = 0,84 <0,001	r = 0,75 <0,001	r = 0,12			
	r = 0,82 <0,001	r = -0,53 <0,001	r = -0,80 <0,001	r = 0,26 <0,01	r = 0,12		
	r = 0,74 <0,001	r = 0,77 <0,001	r = -0,77 <0,001	r = 0,21 <0,05	r = 0,26 <0,01	r = 0,90 <0,001	

(r = -0,80, <0,001), (r = -0,79, <0,001),
 (r = -0,77, <0,001), (r = -0,55, <0,001),
 (r = -0,53, <0,001), (r = -0,50, <0,001),
 (r = -0,50, <0,001), (r = -0,44, <0,001), (r = -0,41, <0,001),
 (r = 0,84, <0,001), (r = 0,82, <0,001),
 (r = 0,77, <0,001), (r = 0,75, <0,001),
 (r = 0,74, <0,001).

(, , / , IVRT, DT, ,)

5

5-

			/	IVRT	DT		
	r = 0,35, <0,01	r = -0,31, <0,05	r = 0,41, <0,01	r = 0,06,	r = -0,41, <0,01	r = 0,31, <0,05	r = -0,59, <0,001

5, (r = -0,59, <0,001), DT (r = -0,41, <0,01) (r = -0,31, <0,05);
 (r = 0,41, <0,01), (r = 0,35, <0,01) (r = 0,31, <0,05).

(6).

6-

	F ()	F
	225,8	< 0,001
	79,22	< 0,001
	17,79	< 0,001
	2,90	< 0,05

6,

(225,8 79,22 , <0,001),

2,85

(17,79 2,90).

3

(205,2 ± 17,8),

(285,1 ± 20,1)

-(307,2 ± 20,8) / (. 3).

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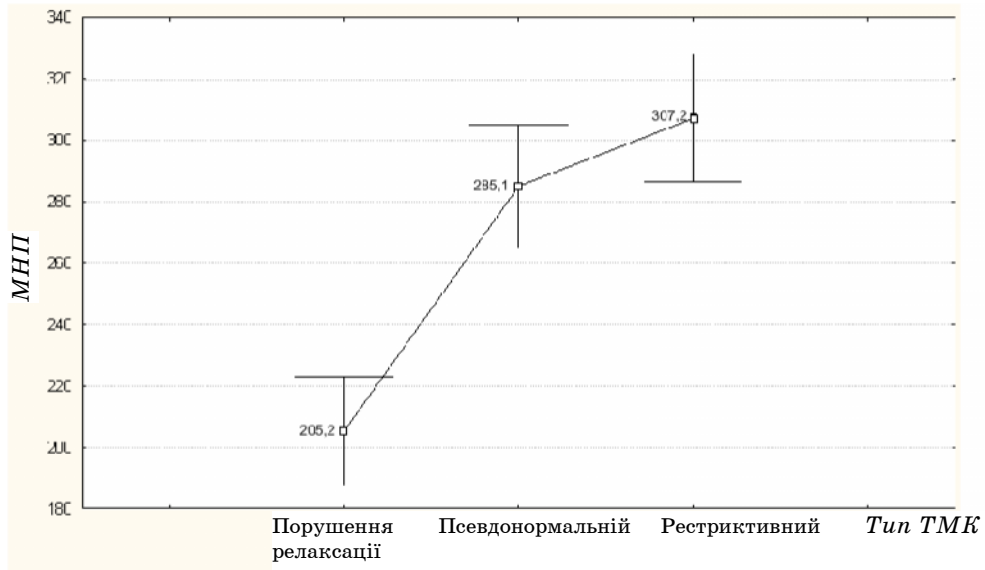
(r = - 0,62, <0,001),

6,

(r = - 0,56, <0,001)

(r = - 0,37, <0,001).

– (r = –0,28, <0,05).



3 –

6 –

	F ()	F
	225,8	< 0,001
	79,22	< 0,001
	17,79	< 0,001
	2,90	< 0,05

(7).

7 –

	F ()	F
	176,87	< 0,001
	78,94	< 0,001
	2,79	< 0,05

7, –

<0,001), – 63,4 ; 2,24 , 176,87,
 $(4,22 \pm 0,06)$, – $(3,20 \pm 0,10)$,
 $-(2,34 \pm 0,07)$ V $-(1,94 \pm 0,06)$ / (.4).

SUMMARY

INTERCOMMUNICATIONS OF STRUCTURALLY FUNCTIONAL CHANGES OF HEART AND BIOCHEMICAL INDEXES OF BLOOD AND URINE IN PATIENTS WITH CHRONIC HEART FAILURE AND CHRONIC KIDNEY DISEASE

N. Kochueva, A.S. Shalimova, V.G. Psareva

The article provides the results of intercommunications of structurally functional changes of heart and biochemical indices (including brain natriuretic peptide and serum carboxy-terminal telopeptide of procollagen type I) in patients with chronic heart failure and chronic kidney disease.

Key words: *of intercommunications, structurally functional changes, biochemical indices, chronic heart failure, chronic kidney disease.*

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