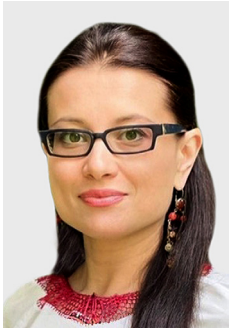
УДК 615.5–002.525.2:616.1]–06–07



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Clinical Markers of the Heart and Blood Vessels Syntropic Lesions in Patients with Systemic Lupus Erythematosus, Their Diagnostic Value (Second Notice)

Introduction. The significant prevalence of blood vessel lesions in patients with systemic lupus erythematosus (SLE) is described in many scientific works [1-6, 10]. However, a review of the available literature revealed no studies that mentioned examining the relationship between clinical markers, or constellations thereof, and these syntropic blood vessel lesions.

Increasing the effectiveness of treatment of patients with SLE with syntropic blood vessel lesions [7, 8] requires the clinician in certain situations, in particular, to find new, effective, low-cost methods of detecting these blood vessel lesions, to have information about the diagnostic value of their clinical markers.

The aim of the study. To find out the clinical markers of the blood vessels syntropic lesions in patients with systemic lupus erythematosus, and their diagnostic value.

Materials and methods. Clinical markers of blood vessel syntropic lesions in patients with SLE were used for the study, which were selected according to the criteria of our method [9].

Results of the second stage of research and their discussion. To carry out *the first step of the second stage*, the frequency of cases of clinical markers in patients with SLE with blood vessel lesions was assessed and only those that met the criteria of our methodology were selected for the study.

Therefore, patients with SLE with A. G. M. Raynaud's syndrome insufficiency significantly ($p < 0.05$) more often than patients with SLE without it had morning stiffness, new rashes, paleness of the fingers and toes in the cold, chilliness of the extremities, memory problems.

Significantly more often ($p < 0.05$), SLE patients with symptomatic hypertension had skin dryness, legs swelling, shortness of breath, palpitations, headache, increased blood pressure, displacement of the left border of the heart to the left, accent of the second tone on the aorta than SLE patients without it.

Significantly more often ($p < 0.05$), SLE patients with livedo reticularis had skin dryness, chilliness of the extremities, and shortness of breath than SLE patients without it.

In patients with SLE with retinal angiopathy significantly ($p < 0.05$) more often than in patients with SLE without it, morning stiffness, paleness of the fingers and toes in the cold, the presence of swelling on the lower extremities, shortness of breath, palpitations, headache, increased blood pressure, displacement of the left border of the heart to the left, accent of the second tone on the aorta were detected.

In patients with SLE and pulmonary hypertension, morning stiffness, the presence of swelling on the lower extremities, shortness of breath, palpitations, memory problems, and accent of the second tone on the pulmonary artery were recorded significantly ($p < 0.05$) more often than in patients with SLE without it.

Significantly more often ($p < 0.05$), muscle aches, shortness of breath, and memory problems were recorded in patients with SLE with atherosclerosis than in patients with SLE without it.

In patients with SLE and venous thrombosis significantly ($p < 0.05$) more often than in patients with SLE without it, the presence of swelling on the lower extremities, shortness of breath, and palpitations were detected.

Significantly more often ($p < 0.05$), headache was recorded in patients with SLE with capillaritis than in patients with SLE without it.

The results of *the second step of the second stage*, in which the diagnostic value of clinical mono markers of syntropic blood vessel lesions, that is, each clinical marker separately in patients with SLE, were determined are presented in table 3 (table 1, 2 - Lviv Clinical Bulletin. 2024;1(45).

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Table 3

Diagnostic value of significantly more frequently detected clinical markers in patients with systemic lupus erythematosus and syntropic blood vessel lesions (%)

N	Clinical markers	Parameters of diagnostic value		
		Sensitivity, %	Specificity, %	Accuracy, %
1	2	3	4	5
with A. G. M. Raynaud's syndrome				
1	Morning stiffness	38.81	84.48	60.00
2	New rash	50.75	63.79	56.80
3	Paleness of the fingers and toes in the cold	41.79	87.93	63.20
4	Chilliness of the extremities	58.21	79.31	68.00
5	Memory problems	20.89	96.55	56.00
with symptomatic hypertension				
1	Skin dryness	39.53	76.83	64.00
2	Legs swelling	46.51	87.65	73.39
3	Shortness of breath	48.84	73.17	64.80
4	Palpitations	41.86	76.83	64.80
5	Headache	39.53	85.37	69.60
6	Increased blood pressure	65.12	80.49	75.48
7	Displacement of the left border of the heart to the left	41.86	90.24	73.60
8	The accent of the second tone on the aorta	67.44	86.59	80.00
with livedo reticularis				
1	Skin dryness	40.00	75.56	65.60
2	Chilliness of the extremities	54.29	64.44	61.60
3	Shortness of breath	51.43	72.22	66.40
with retinal angiopathy				
1	Morning stiffness	50.00	79.57	72.00
2	Paleness of the fingers and toes in the cold	46.88	78.49	70.40
3	Legs swelling	37.50	80.43	69.35
4	Shortness of breath	56.25	73.12	68.80
5	Palpitations	50.00	77.42	70.40
6	Headache	37.50	81.72	70.40
7	Increased blood pressure	71.88	77.42	76.00
8	Displacement of the left border of the heart to the left	40.63	86.02	74.40
9	The accent of the second tone on the aorta	62.50	78.49	74.40
with pulmonary hypertension				
1	Morning stiffness	50.00	75.23	72.00
2	Legs swelling	62.50	81.48	76.00
3	Shortness of breath	62.50	69.72	68.80
4	Palpitations	56.25	74.31	72.00
5	Memory problems	31.25	89.91	82.40
6	The accent of the second tone on the pulmonary artery	62.50	98.17	93.60

Contin of the table 3

1	2	3	4	5
with atherosclerosis				
1	Muscle ache	61.54	75.00	68.97
2	Shortness of breath	76.92	68.75	72.41
3	Memory problems	38.46	93.75	68.97
with venous thrombosis				
1	Legs swelling	85.71	68.64	69.60
2	Shortness of breath	57.14	77.78	76.61
3	Palpitations	71.43	72.88	72.80
with capillaritis				
1	Headache	75.00	78.51	78.40

As we can see in the table 3, the sensitivity of such a clinical marker as morning stiffness (direct relationship, $p = 0.002$) for the detection of A. G. M. Raynaud's syndrome in patients with SLE is 38.81 %, specificity - 84.48 %, accuracy - 60.00 %; sensitivity of the presence of new rashes (direct relationship, $p = 0.038$) is 50.75 %, specificity - 63.79 %, accuracy – 56.80 %; sensitivity of the presence of paleness of the fingers and toes in the cold (direct relationship, $p = 0.001$) is 41.79 %, specificity - 87.93 %, accuracy - 63.20 %; sensitivity of the chilliness of the extremities (direct relationship, $p = 0.001$) as a marker reaches 58.21 %, specificity - 79.31 %, accuracy -68.00 %; sensitivity of the complaint to memory impairment (direct relationship, $p = 0.003$) is 20.89 %, specificity - 96.55 %, accuracy - 56.00 %. The optimal diagnostic value for detecting A. G. M. Raynaud's syndrome in patients with SLE is a chilliness of the extremities (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.001$).

The sensitivity of the complaint to skin dryness (direct relationship, $p = 0.027$) for the detection of symptomatic hypertension is 39.53 %, specificity - 76.83 %, accuracy - 64.00 %; sensitivity of the presence of legs swelling (direct relationship, $p = 0.001$) is 46.51 %, specificity - 87.65 %, accuracy - 73.39 %; sensitivity of the complaint to shortness of breath (direct relationship, $p = 0.008$) reaches 48.84 %, specificity - 73.17 %, accuracy - 64.80 %; sensitivity of the complaint to palpitations (direct relationship, $p = 0.016$) is 41.86 %, specificity - 76.83 %, accuracy - 64.80 %; sensitivity of the complaint to headache (direct relationship, $p = 0.002$) as a marker of symptomatic hypertension reaches 39.53 %, specificity - 85.37 %, accuracy - 69.60 %; sensitivity of the increased blood pressure (direct relationship, $p = 0.001$) reaches 65.12 %, specificity - 80.49 %, accuracy - 75.48 %; sensitivity of the displacement of the left border of the heart to the left (direct relationship, $p = 0.001$) is 41.86 %, specificity - 90.24 %, accuracy - 73.60 %; sensitivity of the presence of accent of the second tone on the aorta (direct relationship, $p = 0.001$) is 67.44 %, specificity - 86.59 %, accuracy - 80.00 %. The optimal diagnostic value for detecting symptomatic hypertension in patients with SLE is an accent of the second tone on the aorta (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.001$).

The sensitivity of a clinical marker skin dryness (direct relationship, $p = 0.040$) as a marker of livedo reticularis in patients with SLE is 40.00 %, specificity - 75.56 %, accuracy - 65.60 %; sensitivity of the chilliness of the extremities (direct relationship, $p = 0.027$) reaches 54.29 %, specificity - 64.44 %, accuracy - 61.60 %; sensitivity of the presence of shortness of breath (direct relationship, $p = 0.008$) as a marker reaches 51.43 %, specificity - 72.22 %, accuracy - 66.40 %. The optimal diagnostic value for detecting the livedo reticularis in patients with SLE is shortness of breath (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.001$).

The results of the research proved, in patients with SLE with retinal angiopathy, the sensitivity of such a clinical marker as morning stiffness (direct relationship, $p = 0.001$) is 50.00 %, specificity - 79.57 %, accuracy - 72.00 %; sensitivity of the presence of paleness of the fingers and toes in the cold (direct relationship, $p = 0.005$) is 46.88 %, specificity - 78.49 %, accuracy - 70.40 %; sensitivity of the presence of legs swelling (direct relationship, $p = 0.025$) is 37.50 %, specificity - 80.43 %, accuracy - 69.35 %; sensitivity of shortness of breath (direct relationship, $p = 0.002$) reaches 56.25 %, specificity - 73.12 %, accuracy - 68.80 %; sensitivity of the complaint to palpitations (direct relationship, $p = 0.003$) is 50.00 %, specificity - 77.42 %, accuracy - 70.40 %; sensitivity of the presence of headache (direct relationship, $p = 0.018$) is 37.50 %, specificity - 81.72 %, accuracy - 70.40 %; sensitivity of the increased blood pressure (direct relationship, $p = 0.001$) reaches 71.88 %, specificity - 77.42 %, accuracy - 76.00 %; sensitivity of the displacement of the left border of the heart to the left (direct relationship, $p = 0.002$) is 40.63 %, specificity - 86.02 %, accuracy - 74.40 %; sensitivity of the presence of accent of the second tone on the aorta (direct relationship, $p = 0.001$) is 62.50 %, specificity - 78.49 %, accuracy - 74.40 %. The optimal diagnostic value for detecting retinal angiopathy in patients with SLE is increased blood pressure (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.001$).

In patients with SLE with pulmonary hypertension, the sensitivity of such a clinical marker as morning stiffness (direct relationship, $p = 0.029$) is 50.00 %, specificity - 75.23 %, accuracy - 72.00 %; sensitivity of the presence of legs swelling (direct relationship, $p = 0.001$) reaches 62.50 %, specificity - 81.48 %, accuracy - 76.00 %; sensitivity of the complaint to shortness of breath (direct relationship, $p = 0.011$) is 62.50 %, specificity - 69.72 %, accuracy - 68.80 %; sensitivity of the complaint to palpitations (direct relationship, $p = 0.013$) is 56.25 %, specificity - 74.31 %, accuracy - 72.00 %; the sensitivity of the marker, namely, memory problems (direct relationship, $p = 0.027$) is 31.25 %, specificity - 89.91 %, accuracy - 82.40 %; sensitivity of the presence of accent of the second tone on the pulmonary artery (direct relationship, $p = 0.001$) is 62.50 %, specificity - 98.17 %, accuracy - 93.60 %. The optimal diagnostic value for detecting pulmonary hypertension in patients with SLE is the accent of the second tone on the pulmonary artery (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.001$).

In patients with SLE with atherosclerosis sensitivity of the presence of muscle ache (direct relationship, $p = 0.045$) as a marker is 61.54 %, specificity - 75.00 %, accuracy - 68.97 %; sensitivity of the presence of shortness of breath (direct relationship, $p = 0.016$) is 76.92 %, specificity - 68.75 %, accuracy - 72.41 %; sensitivity of the complaint to memory problems (direct relationship, $p = 0.043$) as a marker is 38.46 %, specificity - 93.75 %, accuracy - 68.97 %. The optimal diagnostic value for detecting atherosclerosis in patients with SLE is shortness of breath (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.008$).

It was determined that the sensitivity of the presence of leg swelling (direct relationship, $p = 0.006$) as a marker of venous thrombosis reaches 85.71 %, specificity - 68.64 %, accuracy - 69.60 %; sensitivity of the complaint to shortness of breath (direct relationship, $p = 0.049$) reaches 57.14 %, specificity - 77.78 %, accuracy - 76.61 %; sensitivity of the complaint to palpitations (direct relationship, $p = 0.021$) is 71.43 %, specificity - 72.88 %, accuracy - 72.80 %. The optimal diagnostic value for detecting venous thrombosis in patients with SLE is the presence of leg swelling (diagnostic accuracy reliably exceeds 50.00 %, $p < 0.001$).

The sensitivity of the complaint to headache (direct relationship, $p = 0.036$) as a marker of capillaritis reaches 75.00%, specificity - 78.51 %, accuracy - 78.40 %. It is a diagnostically valuable marker for detecting capillaritis in patients with SLE (diagnostic accuracy significantly exceeds 50.00 %, $p < 0.001$).

The results of *the third step of the second stage of research*, which determined the diagnostic value of the optimal constellation of clinical markers of syntropic blood vessel lesions in patients with SLE, are presented in table 4.

Table 4

Diagnostic value of constellations of clinical markers in patients with systemic lupus erythematosus with syntropic blood vessel lesions (%)

Clinical markers constellations	Parameters of diagnostic value		
	Sensitivity, %	Specificity, %	Accuracy, %
with A. G. M. Raynaud's syndrome			
"Joint pain + chilliness of the extremities"	58.21	81.03	68.80
with symptomatic hypertension			
"Joint pain + accent of the second tone on the aorta"	65.12	86.59	79.20
with livedo reticularis			
"Joint pain + new rash + shortness of breath"	42.86	84.44	72.80
with retinal angiopathy			
"Joint pain + increased blood pressure"	71.88	80.65	78.40
with pulmonary hypertension			
"Joint pain + accent of the second tone on the pulmonary artery"	62.50	98.17	93.60
with atherosclerosis			
"Joint pain + shortness of breath"	76.92	68.75	72.41
with venous thrombosis			
"Joint pain + photosensitivity + shortness of breath"	71.43	86.44	85.60
with capillaritis			
"Palpitations + headache + increased blood pressure"	75.00	95.04	94.40

Carrying out the research made it possible to determine:

- constellation of markers (coefficient of association (CA) = 0.71) in patients with SLE with A. G. M. Raynaud's syndrome ("joint pain + chilliness of the extremities" (sensitivity - 58.21 %, specificity - 81.03 %, accuracy - 68.80 %, $p < 0.001$)), which has a stronger relationship with A. G. M. Raynaud's syndrome than a separate clinical marker (CA = 0.68);
- constellation of markers (CA = 0.85) in patients with SLE with symptomatic hypertension ("joint pain + accent of the second tone on the aorta" (sensitivity - 65.12 %, specificity - 86.59 %, accuracy - 79.20 %, $p < 0.001$)), which has a weaker relationship with syntropic lesion than a separate clinical marker accent of the second tone on the aorta (CA = 0.86);
- constellation of markers (CA = 0.61) in patients with SLE with livedo reticularis ("joint pain + new rash + shortness of breath" (sensitivity - 42.86 %, specificity - 84.44 %, accuracy - 72.80 %, $p < 0.001$)), which has a stronger relationship with syntropic lesion than a separate clinical marker (CA = 0.48);
- constellation of markers (CA = 0.83) in patients with SLE with retinal angiopathy ("joint pain + increased blood pressure" (sensitivity - 71.88 %, specificity - 80.65 %, accuracy - 78.40 %, $p < 0.001$)), which has a stronger relationship with retinal angiopathy than a separate clinical marker (CA = 0.79) in these patients;
- constellation of markers (CA = 0.98) in patients with SLE with pulmonary hypertension ("joint pain + accent of the second tone on the pulmonary artery" (sensitivity - 62.50 %, specificity - 98.17 %, accuracy - 93.60 %, $p < 0.001$)), which has a same relationship with pulmonary hypertension as a separate clinical marker (CA = 0.98);
- constellation of markers (CA = 0.76) in patients with SLE with atherosclerosis ("joint pain + shortness of breath" (sensitivity - 76.92 %, specificity - 68.75 %, accuracy - 72.41 %, $p < 0.016$)), which has a same relationship with atherosclerosis as a separate clinical marker (CA = 0.76);
- constellation of markers (CA = 0.88) in patients with SLE with venous thrombosis ("joint pain + photosensitivity + shortness of breath" (sensitivity - 71.43 %, specificity - 86.44 %, accuracy - 85.60 %, $p < 0.001$)), which has a stronger relationship with venous thrombosis than a separate clinical marker (CA = 0.86);
- constellation of markers (CA = 0.97) in patients with SLE with capillaritis ("palpitations + headache + increased blood pressure" (sensitivity - 75.00 %, specificity - 95.04 %, accuracy - 94.40 %, $p < 0.001$)), which has a stronger relationship with capillaritis than a separate clinical marker (CA = 0.83).

Having found out the clinical markers of syntropic blood vessels lesions in SLE patients and their diagnostic value, it was concluded that the optimal diagnostic value for detecting A. G. M. Raynaud's syndrome in SLE patients among the clinical monomarkers is chilliness of the extremities and the constellation "joint pain + chilliness of the extremities", symptomatic hypertension - accent of the second tone on the aorta and the constellation "joint pain + accent of the second tone on the aorta", livedo reticularis - shortness of breath and the constellation "joint pain + new rash + shortness of breath", retinal angiopathy - increased blood pressure and the constellation "joint pain + increased blood pressure", pulmonary hypertension - accent of the second tone on the pulmonary artery and the constellation "joint pain + accent of the second tone on the pulmonary artery", atherosclerosis - shortness of breath and the constellation "joint pain + shortness of breath", venous thrombosis - legs swelling and the constellation "joint pain + photosensitivity + shortness of breath", capillaritis - headache and the constellation "palpitations + headache + increased blood pressure".

Conclusions. Clinical markers for detecting A. G. M. Raynaud's syndrome in patients with systemic lupus erythematosus are morning stiffness, new rashes, paleness of the fingers and toes in the cold, chilliness of the extremities, memory problems, symptomatic hypertension - skin dryness, legs swelling, shortness of breath, palpitations, headache, increased blood pressure, displacement of the left border of the heart to the left, accent of the second tone on the aorta, livedo reticularis - skin dryness, chilliness of the extremities, shortness of breath, retinal angiopathy - morning stiffness, paleness of the fingers and toes in the cold, legs swelling, shortness of breath, palpitations, headache, increased blood pressure, displacement of the left border of the heart to the left, accent of the second tone on the aorta, pulmonary hypertension - morning stiffness, legs swelling, shortness of breath, palpitations, memory problems, accent of the second tone on the pulmonary artery, atherosclerosis - muscle ache, shortness of breath, memory problems, venous thrombosis - legs swelling, shortness of breath, palpitations, capillaritis - headache.

The optimal value for the diagnosis of A. G. M. Raynaud's syndrome in patients with systemic lupus erythematosus is the constellation of clinical markers "joint pain + chilliness of the extremities", symptomatic hypertension - a separate clinical marker accent of the second tone on the aorta, livedo reticularis - "joint pain + new rash + shortness of breath", retinal angiopathy - "joint pain + increased blood pressure", pulmonary hypertension – a separate clinical marker accent of the second tone on the pulmonary artery or the constellation "joint pain + accent of the second tone on the pulmonary artery", atherosclerosis - a separate clinical marker shortness of breath or the constellation "joint pain + shortness of breath", venous thrombosis - "joint pain + photosensitivity + shortness of breath", capillaritis - "palpitations + headache + increased blood pressure".

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The article was submitted to the editorial board on August 11, 2024.

Conflict of interests
The authors declare no conflict of interests.

Clinical Markers of the Heart and Blood Vessels Syntropic Lesions in Patients with Systemic Lupus Erythematosus, Their Diagnostic Value (Second Notice)

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Introduction. Systemic lupus erythematosus (SLE) due to damage to numerous organs or systems still requires comprehensive study.

The aim of the study. To find out the clinical markers of the blood vessels syntropic lesions in patients with systemic lupus erythematosus, their diagnostic value.

Materials and methods. 118 patients with SLE with syntropic lesions of the circulatory system were examined (107 women (90.68 %) and 11 men (9.32 %) aged 18 to 74 years (average age 42.48 ±1.12 years)).

The study included the identification of clinical markers of blood vessels syntropic lesions, determination of the diagnostic value of individual clinical markers and their constellations in terms of sensitivity, specificity and accuracy in patients with SLE, and the identification of one of them with the most reliable diagnostic value.

Results. Clinical markers for detecting A. G. M. Raynaud's syndrome in patients with SLE are morning stiffness, new rashes, paleness of the fingers and toes in the cold, chilliness of the extremities, memory problems, symptomatic hypertension - skin dryness, legs swelling, shortness of breath, palpitations, headache, increased blood pressure, displacement of the left border of the heart to the left, accent of the second tone on the aorta, livedo reticularis - skin dryness, chilliness of the extremities, shortness of breath, retinal angiopathy - morning stiffness, paleness of the fingers and toes in the cold, legs swelling, shortness of breath, palpitations, headache, increased blood pressure, displacement of the left border of the heart to the left, accent of the second tone on the aorta, pulmonary hypertension - morning stiffness, legs swelling, shortness of breath, palpitations, memory problems, accent of the second tone on the

pulmonary artery, atherosclerosis - muscle ache, shortness of breath, memory problems, venous thrombosis - legs swelling, shortness of breath, palpitations, capillaritis - headache.

The optimal value for the diagnosis of A. G. M. Raynaud's syndrome in patients with systemic lupus erythematosus is the constellation of clinical markers "joint pain + chilliness of the extremities", symptomatic hypertension - a separate clinical marker accent of the second tone on the aorta, livedo reticularis - "joint pain + new rash + shortness of breath", retinal angiopathy - "joint pain + increased blood pressure", pulmonary hypertension - a separate clinical marker accent of the second tone on the pulmonary artery or the constellation "joint pain + accent of the second tone on the pulmonary artery", atherosclerosis - a separate clinical marker shortness of breath or the constellation "joint pain + shortness of breath", venous thrombosis - "joint pain + photosensitivity + shortness of breath", capill aritis - "palpitations + headache + increased blood pressure".

Conclusions. In patients with systemic lupus erythematosus the optimal diagnostic value among clinical monomarkers and their constellations for the detecting of A. G. M. Raynaud's syndrome have chilliness of the extremities, "joint pain + chilliness of the extremities" with an advantage in the constellation, symptomatic hypertension - accent of the second tone on the aorta, "joint pain + accent of the second tone on the aorta" with an advantage in the monomarker, livedo reticularis - shortness of breath, "joint pain + new rash + shortness of breath" with an advantage in the constellation, retinal angiopathy - increased blood pressure, "joint pain + increased blood pressure" with an advantage in the constellation, pulmonary hypertension - accent of the second tone on the pulmonary artery or the constellation "joint pain + accent of the second tone on the pulmonary artery", atherosclerosis - shortness of breath or the constellation "joint pain + shortness of breath", venous thrombosis - legs swelling, "joint pain + photosensitivity + shortness of breath" with an advantage in the constellation, capillaritis - headache, "palpitations + headache + increased blood pressure" with an advantage in the constellation.

Keywords: systemic lupus erythematosus, syntropic lesions of the blood vessels, clinical markers, diagnostic value.

Клінічні маркери синтропічних уражень серця і судин у хворих на системний червоний вовчак, їхня діягностична цінність (повідомлення друге)

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Вступ. Системний червоний вовчак (СЧВ) через ураження численних органів або систем досі потребує всебічного вивчення. Підвищення ефективности курації хворих на СЧВ із синтропічними ураженнями судин вимагає від клініциста пошуку нових, ефективних, малозатратних способів виявлення цих уражень, володіння інформацією про діягностичну цінність клінічних маркерів.

Мета. З'ясувати клінічні маркери синтропічних уражень судин у хворих на системний червоний вовчак, іхню діягностичну цінність.

Матеріяли й методи. Обстежено 118 хворих на СЧВ із синтропічними ураженнями органів системи кровообігу (107 жінок (90,68 %) і 11 чоловіків (9,32 %) віком від 18 до 74 років (середній вік 42,48 ± 1,12 року)). Виявляли клінічні маркери синтропічних уражень судин у хворих на СЧВ, визначали діягностичну цінність окремих клінічних маркерів та їхніх констеляцій за чутливістю, специфічністю й точністю із виокремленням одного з них із найдостовірнішою діягностичною цінністю.

Результати. Клінічними маркерами у хворих на СЧВ для виявлення синдрому А. Г. М. Рейно є ранкова скутість, нові висипання, збліднення пальців рук і ніг на холоді, мерзлякуватість кінцівок, погіршення пам'яти, симптоматійної артеріяльної гіпертензії (АГ) – сухість шкіри, набряки на нижніх кінцівках, задишка, серцебиття, біль голови, підвищення артеріяльного тиску (АТ), зміщення лівої межі серця ліворуч, наявність акценту другого тону над аортою, ретикулярного ліведо – сухість шкіри, мерзлякуватість кінцівок, задишка, ангіопатії сітківки – ранкова скутість, збліднення пальців рук і ніг на холоді, набряки на нижніх кінцівках, задишка, серцебиття, біль голови, підвищення АТ, зміщення лівої межі серця ліворуч, акцент другого тону над аортою, легеневої гіпертензії – ранкова скутість, набряки на нижніх кінцівках, задишка, серцебиття, погіршення пам'яти, акцент другого тону над легеневою артерією, атеросклерозу – біль у м'язах, задишка, погіршення пам'яти, тромбозу вен – набряки на нижніх кінцівках, задишка, серцебиття, капіляриту – біль голови.

Найбільшу діягностичну цінність для діягностики синдрому А. Г. М. Рейно у хворих на СЧВ має констеляція клінічних маркерів «біль у суглобах + мерзлякуватість кінцівок», симптоматійної АГ – окремий кліні-

нічний маркер акцент другого тону над аортою, ретикулярного ліведо – «біль у суглобах + нові висипання + задишка», ангіопатії сітківки – «біль у суглобах + підвищення АТ», легеневої гіпертензії – окремий маркер акцент другого тону над легеневою артерією або констеляція «біль у суглобах + акцент другого тону над легеневою артерією», атеросклерозу – окремий маркер задишка або констеляція «біль у суглобах + задишка», тромбозу вен – «біль у суглобах + фотосенсибілізація + задишка», капіляриту – «серцебиття + біль голови + підвищення АТ».

Висновки. У хворих на системний червоний вовчак оптимальну діягностичну цінність серед клінічних мономаркерів і їхніх констеляцій для виявлення синдрому А. Г. М. Рейно мають мерзлякуватість кінцівок, «біль у суглобах + мерзлякуватість кінцівок» з перевагою у констеляції, симптоматійної артеріяльної гіпертензії – наявність акценту другого тону над аортою, «біль у суглобах + акцент другого тону над аортою» з перевагою у мономаркера, ретикулярного ліведо – задишка, «біль у суглобах + нові висипання + задишка» з перевагою у констеляції, ангіопатії сітківки – підвищення артеріяльного тиску, «біль у суглобах + підвищення артеріяльного тиску» з перевагою у констеляції, легеневої гіпертензії – акцент другого тону над легеневою артерією або «біль у суглобах + акцент другого тону над легеневою артерією», атеросклерозу – задишка або «біль у суглобах + задишка», тромбозу вен – набряки на нижніх кінцівках, «біль у суглобах + фотосенсибілізація + задишка» з перевагою у констеляції, капіляриту – біль голови, «серцебиття + біль голови + підвищення артеріяльного тиску» з перевагою у констеляції.

Ключові слова: системний червоний вовчак, синтропічні ураження судин, клінічні маркери, діягностична цінність.

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