THE DYNAMICS OF THE PSYCHO-EMOTIONAL STATUS AND THE FUNCTIONAL STATE OF ANS AFTER COURSE OF KINESIOTAPING IN THE FIELD OF SOLAR PLEXUS

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Resume: the article deals to the influence of kinesiotaping in the field of solar plexus on the functional state of ANS and psyho-emotional status. Kinesiotaping is one of the most easily accessible ways to keep our homeostatic systems. Kinesiotaping in the field of solar plexus increase the level of stress tolerance and decrease the level of depression and anxiety. This method also contributes to resolution of the vegetative tonus and reactivity.

Резюме: Рассмотрено влияние метода кинезиотейпирования области солнечного сплетения на функциональное состояние ВНС и психоэмоциональный статус исследуемых. Кинезиотейпирование — это один из малоизученных методов коррекции вегетативной нервной системы (ВНС), эффект которого заключается в стимуляции солнечного сплетения путем нормализации микроциркуляции, а также повышения восприимчивости рецепторов.

Relevance. ANS is one of the most important systems in regulation of hemostasis. In our days every man feels the influence of external and internal environments, such as: psycho-emotional stress, incorrect life style or climatically changes. As a result, however, our homeostatic systems become scare [1]. To save our homeostatic systems we should use accessible ways, such as kinesiotaping. Kinesiotaping method is a therapeutic taping technique. Tape is a thin, elastic cotton strip with an acrylic adhesive. These tapes are almost identical to human skin.

Aim. To estimate the dynamics of the psycho-emotional status and the functional state of ANS after course of kinesiotaping in the field of solar plexus.

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- 1. To get initial data with the help of Scales among students;
- 2. To use the method of kinesiotaping;
- 3. To get and compare data after the course of kinesiotaping;

Material and methods. 8 students (man) of PSMU participated in the research. The average age is 21±1 years. The levels of stress were estimated with scales: "Professional Life Stress Scale" by David Fontana,1995; questionnaire "Are you dedicated to Stress?", Berdichev G.D.; the level of anxiety: State – Trait Anxiety Inventory (STAI), Spilberg, Hospital Anxiety and Depression Scale (HADS); Zung Anxiety Rating Scale (ZARS), Beck Anxiety Inventory (BAI), Sheehan Patient Rated Scale (SPRAS) and Beck Depression Inventory (BDI). The functional State of ANS was estimated with: Danini – Ashner reflex, Vegetative Index of Kerdo, Hildebrant's coefficient, Minute Volume of blood circulation, active orthostatic and klinostatic tests. All indices were analyzed before and after the course of kinesiotaping.



Fig.1. The technique of taping

10 procedures of kinesiotaping were carried out during 1 month [2,3]. Working with Statistica we devide all 8 students into 2 groups: before and after course of kinesiotaping. The results of descriptive statistical data you can see in Table 1.

Table 1. The results of initial and final groups before and after course of kinesiotaping.

	Before the course of kinesiotaping				After the course of kinesiotaping			
	Avera ge	Median	Quartile	Deviation	Average	Median	Quartile	Deviation
Danini – Ashner reflex	7,9	8,0	8,5	5,7	10,1	10,0	5,5	3,5
Vegetative Index of Kerdo	-14,7	-8,0	42,0	39,8	-8,1	-6,8	11,8	12,3
Hildebrant's coefficient	4,2	4,4	1,1	0,8	3,7	3,8	0,6	0,36
Minute Volume of blood circulation	3828,	3489,0	1224,0	886,6	3586,8	3683,5	1013,0	697,2
Orthostatic test 1-15	4,9	4,5	4,0	2,9	5,1	5,5	1,5	1,1
Klinostatic test 1-15	3,4	4,0	5,0	2,8	2,8	2,5	1,5	1,8

Results of the research and discussion. There had been a reduction in the level of anxiety and the growth of stress tolerance after the course of kinesiotaping in the field of

solar plexus. Besides, there had been reduction in the risk of reoccurrences of chronic illnesses [3]. The dynamics of the functional state of ANS in patients was the following: the level of activity and reactivity of the Parasympathetic Division of ANS increased. Also we revealed that the period of time of the Parasympathetic Division increased and the period of time of the Sympathetic Division of ANS decreased. All the patients felt improvements in the mood.

Conclusion:

- 1. After the course of kinesiotaping in the field of solar plexus positive dynamic of the psycho-emotional status of patient (the level of anxiety and depression decrease) was noted.
- 2. Moreover positive dynamic was noted in the functional state of ANS (tendencies to vagotony at rest and the level of reactivity of ANS increase).

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