

## STRESS – DISTURBING FACTOR IN THE MEDICAL RECOVERY PROCESS OF VARIOUS TRAUMAS

### Stresul – factor perturbator în procesul de recuperare medicală a diverselor traumatisme

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#### Abstract

*Premises.* Detecting stress-predisposed patients in pre-recovery programs

*Objectives.* The study on the early detection of stress in patients with trauma such as: sprains, dislocation, stretches, fractures; establishing the title of the paper, study of the bibliography, hypothesis, place and period of the experiment, patient groups and methods of research.

*Methods.* In this experiment the following research methods were used: observation, experimental measurement survey, data recording, graphical presentation and questionnaire.

*Results.* Detecting premature stress is very important for the specialist to resort to the most effective treatment and recovery method. In this context, the patient moves more easily over the trauma.

*Conclusions.* Findings from early detection of stress have led to a much faster medical recovery and the patient has not been left with mental trauma.

**Keywords:** stress, eustress, distress, fracture, sprain, dislocation

#### Introduction

“Stress represents a syndrome, a constellation of non-specific responses of general adaptive character (general adaptation syndrome) caused by aggression of body stressors. It induces lesion, wear and tear, and non-specific adaptive responses mediated by neuroendocrine links.” (Selye, H., 1991).

Hans Selye also introduced in 1973 in the scientific circuit the following notions:

- distress: bad stress, negative, harmful, destructive, unpleasant and harmful to the body;
- eustress: good stress, representing a pleasant, positive, vitalizing state (Selye, H., 1973).

#### Stress symptoms:

Trauma constitutes the stress factor which entails the following changes (Holdevici, I., 1999):

- physiological: increase in heart rate, changes in blood pressure, respiratory changes (usually acceleration);
- behavioral, motor: tremors, disorganization of fine motor coordination, decrease of amplitude, or even movement stop (motor block);
- psychological: inappropriate behavioral reactions, decrease of critical sense, narrowing the field of consciousness, development of inadequate motivation, strengthened based on the principles of domination, increase of suggestiveness (Epuran, M., 1992).

#### Internal and external causes:

- psychic trauma: war, accident, earthquake, flood, rape, etc.;
- negative examples: death, job loss, etc;
- positive examples: passing an exam, winning a contest, etc.;
- conflict: divorce, tense relationships with parents, friends, etc.;
- uncertainty;
- exaggerated competition spirit, ambition, perfectionism, etc.;

- developed feeling of guilt (Gh.Aradaivoaice-1999).

### **Stress treatment**

#### *First step:*

- relaxation: walks, breathing exercises, autogenous training, meditation;
- physical exercises;
- avoidance of harmful environment;
- positive thinking;
- doctor appointments.

#### *Classical stress treatment:*

- antidepressants;
- sedatives;
- anxiolytics;
- treatment of the disease at the basis.

#### *Homeopathic treatments:*

- kalium phosphoricum;
- cocculus;
- calcarea phosphorica.

#### *Naturist stress treatment:*

- Acupuncture;
- Electro puncture;
- Reflexology;
- Therapeutic massage and relaxation.

### **Research objectives:**

- Early detection of stress;
- More rapid recovery;
- More rapid reintegration of the patient in the related activity (school, job, family);
- The patient should not remain with mental traumas.

### **Hypothesis:**

Early detection of stress for the patients with several traumas such as: sprains, dislocation, stretches, fractures, led to a shorter recovery time, more rapid reintegration of the patient in the socio-professional activity in the absence of mental traumas.

### **Paper scope, tasks and stages:**

#### *Paper scope:*

- Early detection of stress for the patients with traumas by using the questionnaire "How do you respond to stress?";
- Synthesis of the main ideas from the scientific papers and personal experience;
- Proof of the efficiency of early detection of stress;
- Completion of recovery programs in a superior mental state.

#### *Paper tasks:*

- Formation of the group of subjects by considering age, sex, diagnostic;
- Early detection of stress by answering the questionnaire "How do you respond to stress?";
- Process and analyze the questionnaire of the experimental group.

Patients with the following trauma injuries have been included in the study: sprains, dislocation, stretches and fractures. The experiment was conducted in the Saint Luca Hospital – Bucharest during the period May- December 2017.

15 subjects (9 men and 6 women) with ages between 30-68 years have been analyzed (Fig 4).

#### Research methods:

- Observation;
- Experimental investigation for measuring, analyzing data and graphical presentation;
- Questionnaire “How do you respond to stress?”.

Psychologist I. S. Longer has designed a test consisting of 22 questions for measuring stress on a number of 1600 adults from Manhattan (New York).

#### Research results

##### Score computation and results:

One point is granted for answers 3 or 4 at item 3, answer 3 for item 11 and 2 at item 14. For each of the other items 1 point is granted if number 1 answer is provided.

After questioning the 15 patients, the following results were obtained (Fig 1.):

- 60% obtained between 0 – 3 points, which means that they respond normally to stress;
- 45% obtained between 4 – 6 points, which mean that they are at the limit of normal response to stress;
- 5% obtained a score above 7 points, which indicates a significant discrepancy between the requirements and the personal capacities. Measures of mental equilibrations and consultations by a specialist are needed.

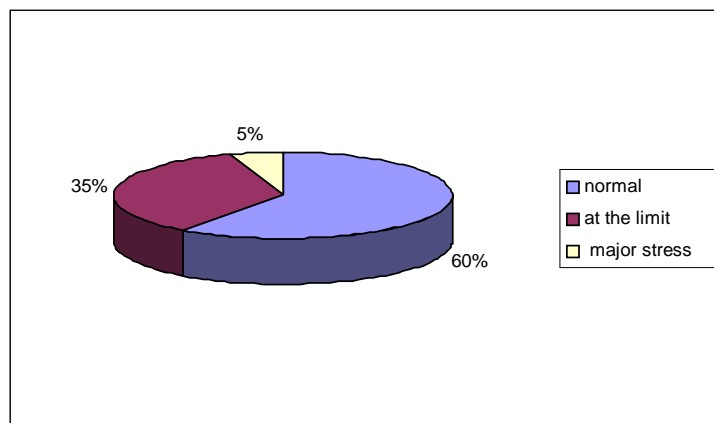


Fig. 1.

Table no. 1. The study conducted revealed that the highest percentage of injury affected the persons with ages between 51-68 years.

Age	30-40	41-50	51-68
Number of patients	3	5	7

Table no. 2. Injury structure. The study conducted revealed that the highest number of patients were affected by sprains

Injury	Fracture	Sprain	Dislocation	Stretch
Number of patients	3	4	5	3

Table. No. 3. Kind structure

Kind	Male	Female
Number of patients	9	6

The study revealed that 5% of the questioned persons had a serious discrepancy between the requirements and personal abilities. In this case, psychological assistance is required. The team of psychological assistance may consist of one psychologist, one doctor, one physical therapist, one physiotherapist, one masseur. The terms of assistance is well known and has, in some circumstances, the aim to help the persons in need to improve their situation. Psychological assistance consists of a series of measures meant to support the patient (Epuran, M., Holdevici, I., 1983).

Early stress detection is very important for specialists in order to apply the most efficient method for treatment and recovery. In this context, the patient recovers easier from trauma, in a shorter period of time, while the reintegration of the patient in the related activities in a good physical and psychical state sooner. (Slăvilă, M., 2007).

#### Conclusions:

- Trauma is a strong stress factor which influences the patient from the perspective of the intensity and severity of the injury and of the psychological answer that we could detect with the help of the test for detecting stress;
- Medical recovery of the patient in a shorter period of time;
- After the medical recovery process is complete, the patient does not remain with mental trauma;
- The reintegration of the patient in activity, family and society is realized in a shorter time period.

#### Proposals:

- Psychological preparation should be performed always before starting the recovery process;
- Early detection of stress, depression and anxiety constitutes a very useful element for both the patient and the therapist;
- The physical therapist should pay special attention to the psychological preparation.

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