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Emotions, traumas and diseases

Summary

The case here being described is part of an experimental plan, whose aim is to validate a hypothesis which consists of five points:

1. the existence of a strong correlation between negative emotional states, traumas (especially those which happened in childhood), stress, cerebral and physical chemistry, somatic diseases
2. negative emotional states, which constitute the active core of trauma, have a dominant role with reference to the preceding elements, so that if it would be possible to dissolve them instantly (completely or partially), the result would be perceivable in real time (within a few days or even in a few hours) on the body, particularly on cerebral and somatic chemistry
3. the functional aspect, when it happens to be the most important, may induce a quick improvement even on the disease itself; the corollary is that in other cases this would create a process aimed at psychic and somatic healing, insofar as organic diseases begin from functional changes
4. it is possible to dissolve the negative emotional states very quickly (which are the active core of the trauma and which constitute therefore a predisposition for somatic pathology) through the method called "Deep nuclei therapy" or DNT
5. the possibility to detect and evaluate the effects of the DNT, with the aim to recover the natural state of wellbeing, comparing the situation before and after the intervention through the method called "Bio-Explorer".

The Bio-Explorer method (see 20, 22, 23, 25, 26) is grounded on the fact that every synaptic mediator is characterized by a specific electromagnetic frequency, which enables the process of investigating in an analytical and non-invasive way the biochemical pattern of key molecules features (markers), expressed freely in all areas of the body, including the brain. As a result we obtain the frequency profile of the different molecules that characterize the cerebral functions, which allows to highlight the presence of emotional-based traumas.

The considerable amount of testing, also in cooperation with clinical departments specializing in a sample of patients with neuro-degeneration in act (AD, VaD, PKD, DLBD, PD, ALS, MS, schizophrenia, etc.), and massive screening of old people during the European Congress of "The Aging Society", highlighted the great potentiality of this method, the parallelism between test results and clinical evidence and the related scientific literature (see 21, 22, 23, 25, 26, 27, 28, 29, 30, 31). For more detailed information regarding the validation of this method you can use the following link: <http://www.biophysics-research.com/Validazione.aspx>.

Deep Nuclei Therapy (or DNT) is a method of brief and integrated therapy, result of the synthesis of fifteen traditional approaches to psychotherapy. It aims to achieve goals that until recent times were considered incompatible, such as reaching profound results and restructuring personality rapidly, so as to stabilize the results in the long run. The peculiarity of this method is the ability to implement the instantaneous repolarization (i.e. within a single work session), even very old emotional states, deep and unpleasant.

The experimental protocol is applied to a patient of 41 years, who has been suffering from bronchial asthma since the age of 6 (see 57, 59). During this experiment, the frequency and intensity of asthma episodes significantly decreased, together with the balancing of

the neurotransmitter and inflammatory profile, as shown by comparing the records through Bio-Explorer, before and after the treatment with DNT.

Since it is a single case, which is part of a larger sample now being tested, it consequently has an illustrative value rather than a demonstrative one.

Introduction

The latest years of research in medicine, psychology and molecular biology demonstrated unequivocally the close relationship between emotions, trauma, stress, subjective perception, on the one hand, and showed most of the diseases which affect human beings, on the other hand. Researches and researchers (see 1, 4, 6, 8, 16, 24) demonstrated the close relationship between psychological variables, in particular emotions, and somatic diseases.

From a functional point of view, it is now evident that psychic phenomena, the nervous system, endocrine and immune systems are integrated into a common network, now studied by a new branch of modern medicine, PNEI, namely the Psycho-Neuro-Endocrine-Immunology (see 56, 58, 60). PNEI defines the disease as “an alteration of balance and communication between the nervous, endocrine and immune systems”. This balance is necessary for the body to respond properly to stressful stimuli of physical, chemical or psychic nature and it is maintained by homeostatic mechanisms that allow adaptation and survival of the organism (see 53, 54, 55).

This response is manifest at both a physiological and a behavioral level and it is mediated by an emotional activation, followed by the cognitive evaluation of the significance of the stimulus (see 7, 10, 14). Nowadays we know that any causal agent (physical, biological or psychosocial) may influence, directly or through emotional mediation, the biological basis of the disease.

By now all the researches on the psychophysiology of stress and emotion have shown that the emotional reaction, in any way induced, is accompanied by neuro-endocrine-immune and behavioral changes(see 11, 12, 13).

The observation that adrenocortical response to emotional stimuli is substantially identical to the one described by Selye about the reaction induced by stress, induced Mason to separate the emotional stimulus from the physical one as a response to stress. He noticed that the emotional reaction immediately precedes or accompanies the physical stimulation to stress (see 1, 2, 3, 4, 5, 6, 7, 8, 9, 10).

In brief, the action of a stressor involves the activation of somatic neuro-endocrine-immune and behavioral response; this response may be mediated by the emotional activation and therefore by its cognitive evaluation as well as by the stressful stimulation.

In particular, it was noticed that in this pattern of response may be activated preferentially the organic (somatization) or behavioral way(outward expression) at varying levels. Moving from the observation of this fact, a theory of a balance between somatic and behavioral expression of emotional activation was put forward (see 14, 15).

The emotional activation is a physiological and adaptive outbreak and allows the individual to “feel” the constant adaptive demands, both physically and psychically. In optimal cases emotional reaction occurs in a balanced way through somatic neuro-endocrine-immune way and behavioral or intrapsychic one. In some individuals this sequence may be skewed by an abnormal tendency to suppression of one or another (see 15, 16).

On the contrary, Lazarus and Folkman define stress as the condition resulting from the interaction of individual and environmental variables, which are mediated by cognitive variables. So the events are stressful inasmuch as they are perceived as such; consequently a

stimulus will produce or not a stress reaction depending on how it is interpreted and evaluated (see 17, 18, 19).

Nowadays all the researches on the psychophysiology of stress and emotion have shown that the emotional reaction, however induced, is accompanied by:

- activation of the hypothalamic-pituitary-adrenocortical axis
- stimulation of the adrenal medulla
- changes in chemical composition and morphology of the blood.

The basic assumption is that the suppression of behavioral way of expression of the negative emotions, arisen in infantile traumatic situations and not well developed (not emerged, unrecognized and not accepted by the subject, even in adulthood) modulate the neuro-endocrine-immune response and the metabolism of neurotransmitters in the central nervous system and consequently in somatic metabolic process.

In this way, the organs and bodily functions that express (“language of function” and “of organ”) those emotional states will be eventually compromised. The disease is therefore a kind of “message” addressed to the awareness that tends not to be understood. Negative emotional states arisen in coincidence of traumatic situations, not processed until adulthood, can preserve and modulate the neuro-endocrine-immune response, causing somatic illnesses.

The experiment that is to be described is aimed to illustrate the effects of the DNT in terms of “emotional repolarization”, i.e. instantaneous dissolution of the emotional (subjective variables) and biochemical aspects (objective variable) of trauma, particularly the ones that occurred in childhood. This corresponds to the differential Bio-Explorer detection of the molecular patterns of cerebral areas before and after DNT.

In the preliminary diagnostic phase, the patient has undergone a series of routine tests and a series of Bio-Explorer detections, in order to point out the presence of a frequency-pattern on the structural framework (i.e., where the constant is represented by the relationship based on the molecular values, rather than by their absolute values). This framework is correlated to the frequency of biochemical processes involved in cerebral and bodily areas related to trauma (the basis of bronchial asthma).

Subject, methods and materials

The experimental protocol consists of three phases:

1. the first diagnostic phase, which includes the initial application of Bio-Explorer method;
2. the therapeutic phase, which includes the application, during a single work session, of Deep nuclei therapy;
3. the second diagnostic phase, which consists of a second series of detections by Bio-Explorer, in order to point out structural differences compared to the previous framework.

The patient, during the examination, reported taking salbutamol (2 puffs 2 times daily) and in case of recrudescence of symptoms also betamethasone (2 grams daily). The frequency of recrudescence during the period in which she was observed was on average 4 times per month. The patient, who has been following a path of analytic-oriented psychotherapy for 8 years, has been subjected to the following diagnostic protocol pre-treatment:

- hemogasanalysis

- pulmonary function tests
- chest radiograph
- 3 Bio-Explorer surveys on a weekly basis.

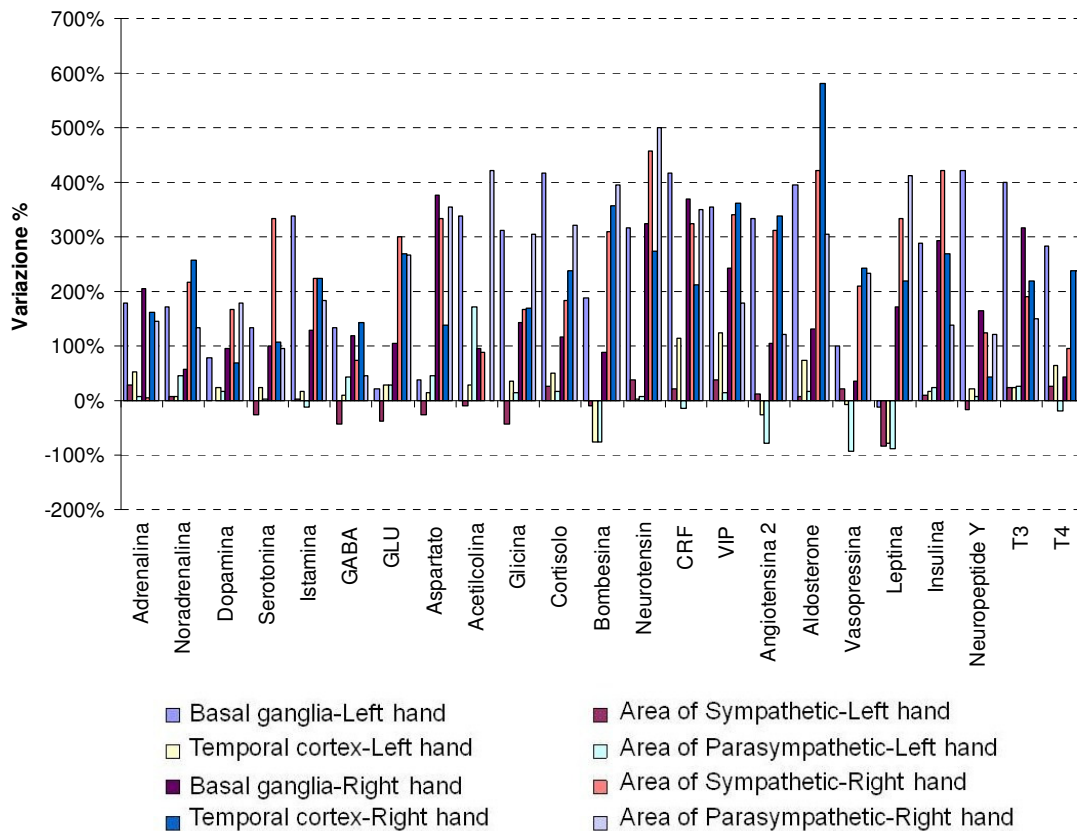
First diagnostics phase

Bilaterally records by Bio-Explorer were made on the following cerebral areas, as follows:

Neurotransmitter pattern on:

- temporal cortex
- basal ganglia
- sympathetic
- parasympathetic system.

Below are diagrams relating to the most significant findings:



This pattern, which is significantly evident with reference to the basal ganglia bilaterally, is typical of a traumatic event that occurred suddenly. This incident has caused not only alarm and fear, but also anger and a vain impetus to act, sadness, anxiety, tendency to have outbursts of anger, but followed by the inability to express it, the feeling of being crushed. Moreover, the relation T3/T4 in favor of the former is representative of an inability to establish a boundary between self and the outside world.

These processes are clearly perceivable with reference to the right-left basal ganglia. Indeed, the diagnostic screening through Bio-Explorer showed a greater presence of the following neurotransmitters for the investigated cerebral areas:

1. the left basal ganglia, an area linked to the family relationships sphere, in particular for male figures:

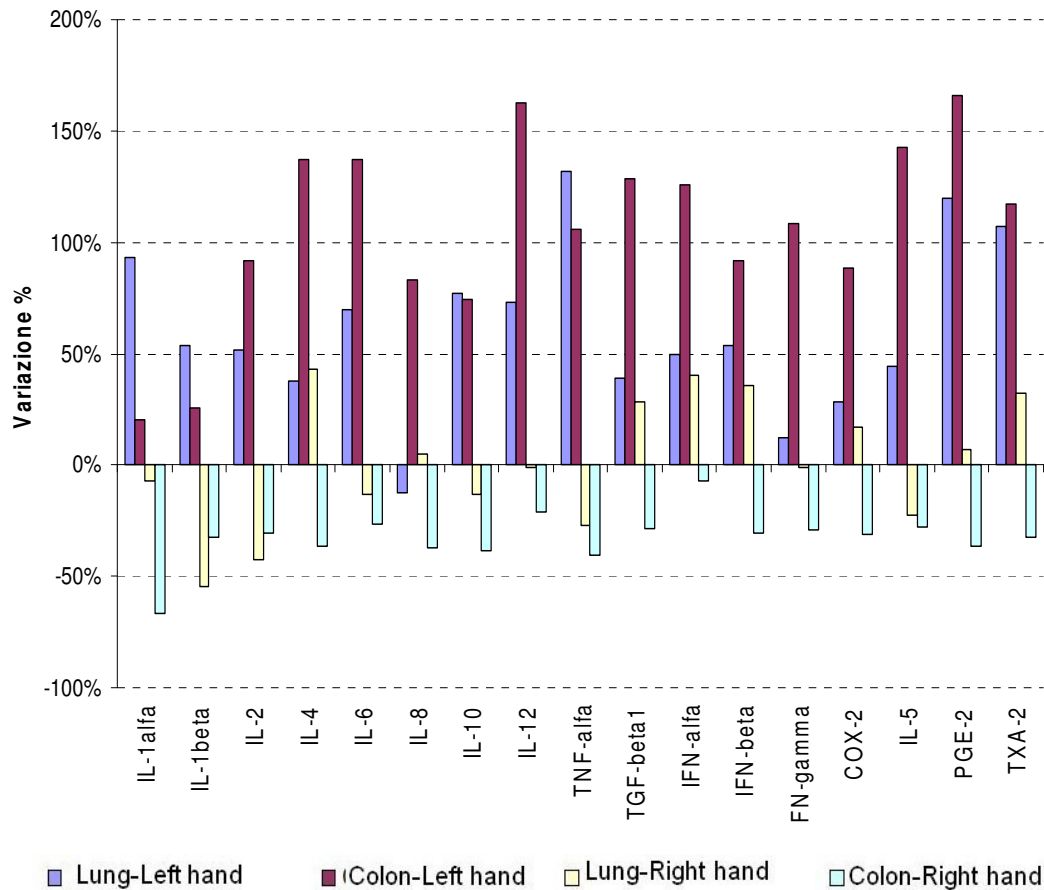
- norepinephrine: neurotransmitter, whose excess represents the emotional state of prevailing anger;
- dopamine: neurotransmitter which governs the control of movement and whose excess represents the emotional state of fear;
- adrenaline: neurotransmitter secreted during the sympathetic activation and which therefore represents the perception of alarm;
- histamine: a reaction linked to anger;
- GABA: inhibitory neurotransmitter, whose excess represents general inhibition;
- acetylcholine: neurotransmitter, whose excess represents inhibition of movement and action;
- cortisol: an indicator of stress in phase of resistance;
- CRF: neuropeptide indicator of stress in phase of resistance, whose excess represents anxiety;
- bombesin: see histamine;
- angiotensin II: hormone secreted during stress periods(phase of resistance), which has a vasoconstriction action;
- aldosterone: hormone secreted during stress periods(phase of resistance), which participates in the control of the metabolism of liquids;
- T3: indicator of processes related to metabolism and especially to the constructive ones; as the constructive or anabolic processes are characterized by absorption and storage of organic matter, in a similar way an increase of the T3 represents an excess of absorption of information or of the stressor which comes from the outside world; followed by the inability of the subject to establish a boundary between self and the environment, and as a consequence feeling overwhelmed by this;
- T4: indicator of processes related to metabolism, particularly of the catabolic ones: an increase of this molecule represents a defense against the outside world in order to avoid the effects of stressors;

2) the right basal ganglia, an area linked to the sphere of family relationships; in this area we noticed an excess of:

- Adrenaline
- Histamine
- GABA
- Cortisol
- CRF
- Angiotensin

- Aldosterone
- T3
- T4

Below is the immune profile of lung and colon:



As we can see, these surveys, carried out before the implementation of the DNT, with reference to the left lung and the left colon, reveal an excess of:

- IL 1 alpha and beta: cytokine, markers of acute inflammation, mainly produced by activated phagocytes; it's a modulator of the immune response with T and B lymphocytes, it stimulates the production of prostaglandins and the formation of IL-2, IL 6, IL-8;
- IL 2: cytokine, marker of inflammation produced by T helper lymphocytes and NK cells (natural killer); an increase of this cytokine causes apoptotic death of T lymphocytes activated by antigen, putting an end to the immune response. It is therefore a modulator of the immune response towards a specific antigen;
- IL 4: produced by Th1 and Th2 lymphocytes, induces T-cell proliferation, it belongs to the allergic mechanisms and represents the main stimulus for the production of IgE antibodies;
- IL 5: regulator and specific activator of eosinophils, it stimulates the proliferation of B lymphocytes and the production of IgA;

- IL 6: marker of acute inflammation, it activates T lymphocytes and stimulates the growth of B lymphocytes to produce antibodies;
- IL 8: induced by IL-1 and TNF α , produced by activated leukocytes and endothelial cells;
- IL 10: can inhibit the synthesis of cytokines and other substances in macrophages; it also inhibits the activation of TH1 lymphocytes, and stimulates the activity of B lymphocyte;
- IL 12: it is secreted in response to the presence of microbes by phagocytes mononuclear dendritic cells; the chain reaction is: microbes > macrophage response > IL-12 > INF- γ > macrophage activation > killing of microbes;
- TNF alpha: tumor necrosis factor (TNF) is the main mediator of the acute inflammatory response to gram-negative bacteria and other infectious agents; it is produced mainly by activated macrophages but also by T lymphocytes and by NK cells; in cerebro-spinal area causes dilation of the blood-brain barrier; it works on the hypothalamus inducing fever, prostaglandin synthesis mediated by hypothalamic cells;
- TGF- β 1: it is synthesized by many types of cells, it induces the production of IgA, but strongly inhibits certain T and B lymphocyte functions. It has several immunosuppressive activity, and, therefore, it works as an inhibitor of immune and inflammatory responses;
- IFN- α : interferon alpha leukocyte, induced mainly by viruses carry anti-viral and anti-tumor;
- IFN- β : it has an action similar to that of the INF- α ;
- IFN- γ : it stimulates the functions of macrophages, NK cells and cytotoxic lymphocytes; it promotes the differentiation of CD4 T helper in TH1 and inhibits the proliferation of TH2;
- COX-2 Cyclooxygenase-2: it is an inducible enzyme linked to the chain of arachidonic acid, which catalyzes the formation of inflammatory prostaglandins (PGE2);
- PGE-2: inflammatory prostaglandins derived from COX-2;
- TXA-2: thromboxane which stimulates platelet aggregation; it is useful in identifying microhemorrhages not visible in cerebrospinal and systemic areas.

To sum up, we can conclude that the activation of innate immunity and Th2 immunity prevails with reference to the left lung, followed by the alteration of Th1/Th2 balance. There are also secondary inflammatory processes in the presence of pathogenic microbes and allergic reaction.

Therapeutic phase

Applying the method of Deep nuclei therapy it is possible to obtain an instantaneous repolarization (i.e. within a single work session) of negative emotional states, linked to traumatic events, even if they happened in a far past, but which are still active in adulthood. Considering the genesis of somatic illness, this method moves from the concept of “direction”.

If we consider the disease as a sort of “message” (based on a symbolic-analogue link to an unpleasant emotional state, which has not adequately been developed), it could also be considered as the last link in a chain consisting of several procedural steps.

Those different somatic functional mechanisms would be arranged in a precise sequence, so as to hesitate in the disease. This would represent a finalized process which requires some kind of intelligence and deliberation. The question now is: who leads this process in an intelligent and finalized way? The answer given by the DNT is: our “parts” or our “deep inner nuclei”.

These nuclei of awareness appear to be not well integrated into the human personality from a global point of view and loaded with old unpleasant emotions that have characterized the traumatic situations of our childhood (especially in the first three years of life). The negative emotional states, which are still active since childhood, constitute the amount of energy necessary to produce the “work”, consisting in deviation from the natural tendency to homeostatic state of health.

This energy is applied intelligently (i.e. in a precise way) so as to alter those somatic functional mechanisms which cause the illness in the body (for example, in multiple sclerosis we observe an imbalance in the immune system, which increases the production of antibodies directed against the neuronal myelin sheath, what may conduct to paralysis of the lower limbs).

All this requires an implicit but precise knowledge of the different mechanisms involved in somatic functions and therefore the willingness to produce that precise effect, functional or organic, which is expression of the denied emotion. This is, in other words, a real direction.

According to the theoretical construct of the DNT, it is a part called “Rejected child” which implements this direction, while another one called “Hegemon adult” plays the role of the performer. The Rejected child would represent the part characterized by ancient pain, while the Hegemon adult embodies the defensive-adaptive attitude, created by the child (the person in flesh and blood of that time) in order to face Rejected child’s unpleasant emotional states.

If this sort of inner director is able to deal with this emotional energy in an intelligent way aiming to produce the disease, it is necessary to change favorably its condition to be able to remove what can be defined as “the powering of disease”. Any therapeutic action which does not take in proper consideration this director in our body will therefore ignore the power of ancient emotions in the process of creating all kind of problems, including the different forms of somatic pathologies.

With regard to the operational aspect, the DNT is applied in laboratories which have a duration variable from 90 to 150 minutes. During these laboratories the therapist tries to reach the following goals:

- a) the repolarization of Rejected child’s emotional negative states, transforming the old affliction into pleasant resources of emotional states;
- b) to restructure the Hegemon adult’s moves, which have so far created a circuit that is grounded on the interaction with the Rejected child’s emotional states (circuit where the negative emotional energy expands and strengthens).

At the end of the first diagnostic phase, the patient undergoes a work session with the DNT, lasting about 2 hours. The therapist applies the DNT without being aware of the results of the first diagnostic phase using Bio-Explorer (the only thing he is aware of is the fact that the patient suffers from asthma).

During the work it emerges what is presumably one of the original traumas, linked to her Rejected child’s emotional states. At the age of 3, she was about to go on holiday with her mother and she was afraid that her father could miss the train.

This is a traumatic episode because it crystallizes a relationship previously existing. The child feels deeply sad because her parents do not get on well and feels fear, since she perceives the father as a violent man. Furthermore, she is profoundly unhappy, feeling that he prevents her from enjoying her childhood. This is the unpleasant emotional state (plus anger, as a reaction to those primary emotions) which will stir the Rejected child.

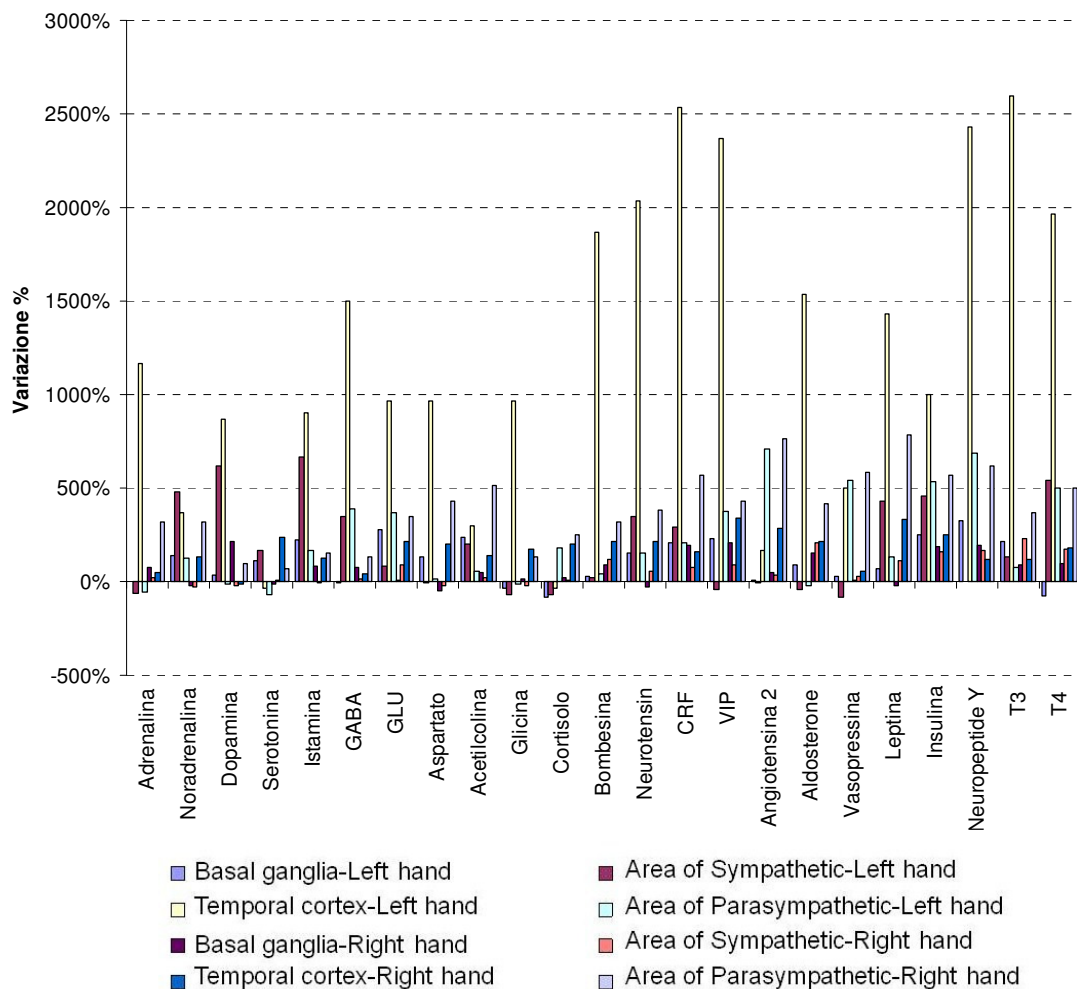
The traumatic situations, representing the ground of unpleasant emotional states, and which, after being denied, will affect cerebral and somatic molecular framework, are not necessarily “traumas” in a strict sense, because they are not necessarily characterized by traumatic events such as abandonment, accidents, violence, and the loss of a family member. Often, these situations are catalyst for awareness of previous and dysfunctional relational models.

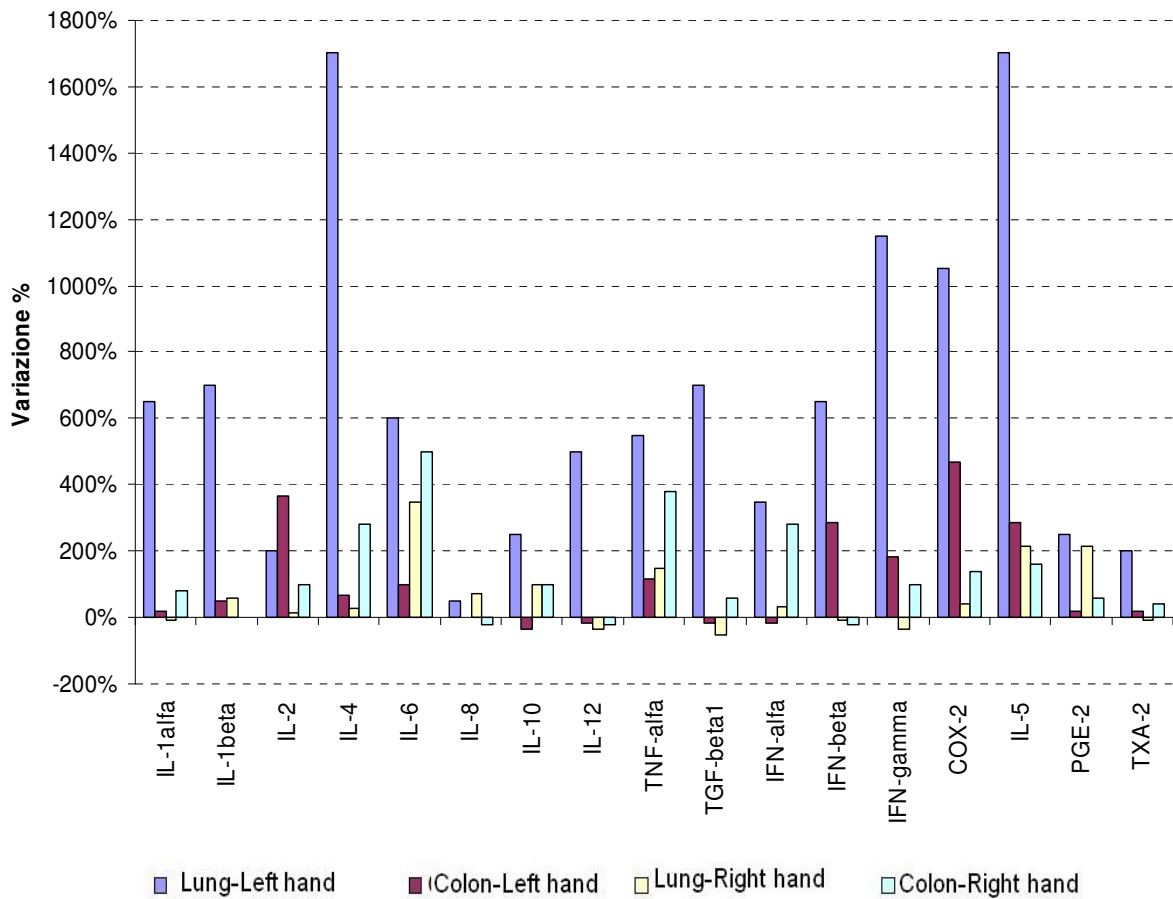
These models are perceived in form of gesture, words, tones of voice, facial expressions, thoughts: all elements from which negative emotions come out. These emotional stases, thus, define the trauma as such; not necessarily when it happens in that particular occasion.

The patient succeeds in a partial emotional repolarization, against very strong resistance, due to the Hegemon adult’s action, who wants to protect her against the danger of ancient emotions. After the work session, the patient affirms feeling a sense of wellbeing.

Second diagnostic phase

After the application of the DNT, the patient has undergone three further Bio-Explorer surveys on the same areas; we list the most important diagrams of these:





As we can see from the records made after the application of the DNT, the pattern of the cerebral neurotransmitter shows a significant decrease of epinephrine, norepinephrine, dopamine, histamine, CRF and aldosterone. These observations are conformed to what is reported by the patient, namely a sense of greater well-being and calm, along with a significant reduction of anxiety symptoms and a better balance in social relations.

With regard to inflammatory lung pattern we see a significant reduction of the expression of COX2 and PGE2, an increase of IL 4, IL 5 and INF gamma and no major changes in other cytokines. This picture shows the molecular reduction of the inflammatory response along with a reduction of innate immunity, a slight reduction of acquired immunity Th2 and an increase of immune activation Th1. Thus, we observe a better balance of the immune activity Th1/Th2, even if an allergic-type reaction persists, as evidenced by the molecular framework.

As we can see, the molecular framework presents two different sides: the significant reduction of molecules (adrenaline, noradrenaline, dopamine, histamine, and aldosterone CRF) directly linked to emotional states, on the one hand, and the persistence of the allergic reaction, on the other hand.

Let's focus now on the DNT: while the first side points out a change of the Rejected child's emotional condition (the part which was the receptacle of the unpleasant emotions, arisen together with the traumatic situation), the second side instead reports the Hegemon adult's adaptive moves, which cannot be modified in a single laboratory.

This would represent the typology called "Previdente", which usually comes from the mood of fear (see the high levels of adrenaline and dopamine before the intervention of the DNT) and it aims to put away what it considers dangerous and what appears to be similar to an allergic reaction (see the presence of IL 4 and IL 5).

It is therefore interesting to notice that the molecular framework accurately reflects what has actually been done in the laboratory of the DNT, by observing the change and the persistence of molecular mechanisms.

Results and conclusions

Subjective assessment by the patient. During the monitoring carried out 40 days after the session of the DNT, the patient reported, after several days of worsening, a significant reduction of the frequency and the intensity of asthma episodes.

In particular, only 2 episodes in that time were noticed and the reduction of their intensity has also allowed to reduce the dosage of medicines. She reports feeling better, more balanced with the outside world and she notices in particular a significant improvement in the relationship with her sister, against whom there was a strong conflict.

Far from being confined only to the sphere of instrumental detection, the improvement comes fully into her consciousness in the form of feelings, behaviors, different and positive relational situations.

Objective Bio-Explorer survey. It is important to consider that the cerebral areas investigated in the preliminary stage clearly showed the presence of an excess of neurotransmitters, including adrenaline, noradrenaline, dopamine, acetylcholine, histamine, cortisol, aldosterone, and CRF. This pattern is typical of an emotional reaction characterized by anxiety, anger, helplessness and lack of action.

In the post treatment by DNT free neurotransmitters level is clearly lower, showing an improvement in the emotional pattern as reported by the patient. The comparison between the values of the two previous plots, with reference to the basal ganglia of the left, shows the rebalancing of the relationship between T3 and T4 and a significant decrease in the levels of dopamine, noradrenaline, adrenaline, aldosterone, cortisol and CRF.

The left side of the basal ganglia shows the most significant change, and we have to underline the fact that it corresponds to the conflict with a male figure, as detected during the working session with the DNT.

Experimental results. The two methods, Bio-Explorer and Deep nuclei therapy, when used in combination, support the hypothesis that denied unpleasant emotions, arisen in childhood, are the basis of somatic diseases. DNT represents a method to study them very quickly, while the results in terms of molecular pattern modifications can be objectively detected by Bio-Explorer.

In particular, this experiment shows how the effects of a single working session with the DNT can also reflect on the metabolism of cerebro-spinal areas related to the trauma of the past. The frequency profile of these areas is subjected to change, in particular with reference to the biochemical synaptic, which corresponds to emotional states.

These observations are in favor of the hypothesis that traumatic and even very old emotional states, as well as their cerebral e somatic biochemical correlates, can be rebalanced very quickly, debunking the theory, whose ground is that the time needed to change is proportional to the time during which you were affected by this problem. The collection of a greater number of cases will be useful to clarify these phenomena.

It is currently developing a research project which contemplates the collaboration between the Biophysics Research, the company which worked out the method of Bio-Explorer, and the CFR, which deals with research and training in Deep nuclei therapy.

The authors

Dott. Giorgio Crucitti: surgeon specialized in Thoracic Surgery, has integrated molecular medicine and Deep nuclei therapy, carrying out research on mind-body connection. He works in Rome with the Biophysics Research, focuses on the relationship between emotions and cerebral chemistry, studying QEDC (Consistency Quantum Elettrodinamica) and using Bioexplorer, which enables the measurement of these reports, because of the recognition of the objective trauma and its influence on health.



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