## Neurologic Disorganization

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## Abstract

Neurologic disorganization, or switching, is caused by the nervous system's complex response to incorrect nerve receptor signaling. Switching may disturb perception, cognitive processing, motor and organic functions. Popular quick-fix treatments for switching often leave underlying causes untreated, making it necessary to continually repeat the quick-fix. With kinesiologic techniques and methods of inquiry, underlying causes may be located and treated, permanently correcting neurologic disorganization.

Neurologic disorganization, or switching as it is commonly called, is a state of confusion within the nervous system. Although sometimes caused by problems within the central nervous system itself, neurologic disorganization is most often caused by incorrect nerve receptor signaling. Acting upon information received from nerve receptors, the nervous system directs all the functions of the body. When some disturbance causes nerve receptors to relay correct information, the response of the nervous system is inappropriate. In computer programming, this principle is stated, "Garbage in, garbage out."

One typical nervous system response to stimuli from nerve receptors is the activation of certain muscles (facilitation) and the sedation of other muscles (inhibition). Through this mechanism of muscular facilitation and inhibition, the nervous system mechanically balances body structure and coordinates movement. By responding correctly to an incorrect signal, the nervous system creates mechanical imbalances and directs movement inappropriately.

What was at first only an incorrect signal has led in this example to poor balance, alignment, and incorrect patterns of movement. These imbalances stimulate more nerve receptors which signal the nervous system to attempt to adapt the body to the imbalances (which the nervous system created in response to the incorrect nerve receptor signaling). This creates further imbalances and so forth. This confusing chain of reactive, adaptive imbalances characterizes all neurological disorganization.

These feedback reverberations between the nervous and structural systems create a chain of imbalances, often upsetting the function of organs as well. If higher spinal and brain centers are involved in the processing of incorrect nerve receptor signals, difficulties may arise in any of the structural (muscle, tendon, ligament, connective tissue and bone) or organ systems, creating symptoms far removed from the original imbalance. When one of these symptoms becomes severe enough, one seeks professional help. The patient then presents the problem to the doctor or therapist who seeks to eliminate it. Direct treatment of such symptoms may be only temporarily effective, or may lead to the emergence of other secondary symptoms, if the underlying disturbance has not been corrected. Diagnosis and treatment of the primary disturbance is the most effective solution to the many problems neurologic disorganization creates.

When the nervous system receives conflicting information from various nerve receptors, as is the case when some receptors send incorrect information, generalized confusion may result. In this state of neurologic disorganization, the two eyes may receive unsynchronized motor impulses resulting in double vision or other visual disturbances. Interpretation of visual and auditory stimuli may also be confused as in dyslexia (learning difficulties). Switching may be responsible for pain, postural imbalances, organ malfunction, problems with orientation and coordination, concentration and learning difficulties, mental confusion, problems with seeing, reading, hearing, speaking, and reversal (switching) of numbers, letters, syllables, left and right, and other opposites.

Switching may also manifest in unresolved health conditions which resist treatment and by the doing of the opposite of what was requested or intended. Typically, people with such problems are considered stupid, handicapped, or retarded. Especially if so labeled in youth, one tends to accept and believe such labels. Early recognition and treatment can prevent the social stigma and many personal difficulties resulting from neurologic disorganization.

Correction of neurologic disorganization requires an understanding of the various nerve receptors, knowledge of how the nervous, structural, and organ systems of the body interact, and techniques to locate and correct cells which signal the nervous system to increase muscular tension. This serves to prevent damage to the muscle fibers, the tendons, the attachment of the tendons to the bones, and the bones themselves from overstretching of the muscles.

Muscle tone (the level of constant muscle contraction) can be directly affected by manipulation of the golgi cells. Activating the golgi cells by pulling the extreme ends of a muscle apart increases muscle tone. Sedating of the golgi cells by pushing the extreme ends towards the center of a muscle reduces muscle tone.

Spindle cell receptors, in the contracting fibers of a muscles, monitor the level of muscular contraction. The spindle cells are responsible for signaling the nervous system to reduce the tension in an overcontracted or cramped muscle. Pushing the spindle cells together with two hands or fingers along the muscle in the direction of the muscular fibers reduces muscle tone. The application of this technique to a tight upper trapezius muscle between the neck and shoulder can swiftly reduce tension and pain in the muscle and lower the shoulder a few centimeters. Stretching the spindle cells by pushing the two hands or fingers into the belly of a muscle and pulling apart will stimulate the spindle cells to signal the need for increased tension in the muscle.

Signaling levels from golgi and spindle cells are not responsible for most of the subjective sense of posture and movement. Being told not to slouch and to stand straight does not create lasting postural change because proprioceptor signaling has not been changed. Thus the new attempted posture feels wrong and the old poor posture still feels right.

The golgi cell and spindle manipulation techniques described are used to rebalance muscular tone by adjusting the signal levels produced by these proprioceptors. Through such treatment, the body's sense of its own balance and orientation changes, making the new postural tension levels in the muscles feel correct. Also pains are thereby reduced and new patterns of more efficient posture and use become more automatic. Changing muscle tone and the sensory awareness of correct posture use through golgi and spindle cell manipulation in an example of the correcting of neurologic disorganization through adjusting the output signal of sensory nerve receptors.

Manipulation of the golgi and spindle cells can swiftly return full extension to a shortened muscle. Such techniques may be successful for sports injuries, allowing the player to return quickly to active participation. Care must be observed, however, to give a damaged muscle time to heal even though pain has been relieved and range of motion has been restored by these methods.

Trauma to a muscle often causes neurologic disorganization. If proper treatment to the golgi and spindle cells is given soon after an injury, the maladaptation responses characteristic of neurologic disorganization can be avoided.

Chemical receptors (chemoreceptors) relay information to the nervous system concerning the chemistry within and upon the body. The most sophisticated chemoreceptor is the hypothalamus, located under the skull, at the root of the nose. This organ consists of brain tissue, hormone producing tissue, and nerves which hang into the bloodstream making continuous chemical analysis of the contents of the bloodstream. Since its secretions control the activity of all other hormone producing glands, it is called the master gland.

Foods or chemicals in the mouth are partially absorbed through the veins under the tongue

and are thus swiftly in the bloodstream. The hypothalamus detects the chemical content and is believed to initiate the energy reactions detected by muscle testing.

Many kinesiologists test chemical substances, especially potential toxins or allergens which could be dangerous to present directly, through closed containers placed upon the body. No satisfactory mechanism for this phenomena has been proposed. Observations should now concur, allowing the kinesiologist to diagnose correctly and treat detected problems.

By eliminating switching, these techniques improve coordination and learning abilities. Thus, these simple techniques are used in schools with success. Athletes also use them for a quick tune-up before competition.

In some, this quick treatment is adequate to establish lasting neurologic organization. For most, unfortunately, all the signs and problems of switching soon return. For all the benefits, temporary elimination of switching is only a symptomatic treatment. For this reason, the effected improvement of learning and coordination, so useful in schools, must be repeated on a regular basis to continue to be effective.

By identifying and solving the underlying problems of neurologic disorganization, many health, coordination and learning difficulties may be solved on a permanent basis. If, despite all attempts at permanent correction, signs of neurologic disorganzation recur, the patient should be referred to a more qualified specialist.

To locate the underlying cause(s) of neurologic disorganization, touch an active (muscle weakening) K27, (CV24 or GV27) while simultaneously stimulating suspected causative factors. Suspect factors must have no effect upon muscle strength when tested alone (in the clear). If they do affect muscle strength, this must be corrected before further testing. A factor which tests strong when tested in the clear is stimulated simultaneously with the touching of the K27s. If the factor eliminates the muscle weakening effect of active K27s, it is a causative factor of switching. Treatment of such factors should permanently eliminate neurologic disorganization.

The most commonly found causes of neurologic disorganization include problems in the neck, the skull, the pelvis, the jaw hinge (temporomandibular joint), the gait mechanism, cloacal synchronization, ionization, the orientation of the body segments to each other, and in failure of normal organization to develop. Faulty proprioceptor signaling from anywhere in the body may cause switching. Asking the patient for a history of injuries will help the kinesiologist to know where to look for such problems.

Toxic chemicals or an imbalance of internal chemistry may cause switching. Nutritional supplements which eliminate the active K27 will help such a patient.

If an active K27 is eliminated by placing the other hand upon the forehead (two handed therapy localization of the K27s and the forehead), the cause of switching is mental. Much research is still needed in the examination and treatment of the mental causes of switching.

Though temporarily treated, switching may occur repeatedly during a single session, especially when issues of high emotional charge, will, or control are involved. Creating an atmosphere of relaxation and trust in the therapist will help the patient to remain unswitched. Observing the body language of switching (head tilt, body asymmetry in general, a change in the tone of voice, or a change in the coloration of the skin) will help the kinesiologist to be aware of the moment when a patient switches.

The tendency to switch (in both patient and therapist!) may be prevented by a symmetrically balanced posture, and by active awareness of the two sides, the top and bottom, and the back and front of the body. Also helpful is to keep both eyes well open and to attend to both visual fields, including the right and left peripheral extremes. Conscious awareness of opposites (spatial or mental between each side of an inner conflict) helps prevent neurological disorganization.

Locating and correctly treating the underlying causes of neurologic disorganization is likely the most important step towards health, success, happiness, and improved function in all areas of life.