Medication less stress management (A review)

Dr Sanjay Sharma

Chemistry Department, DAV College, Amritsar (India),

+919988627010,sansharma560@gmail.com

ABSTRACT:

Some physical symptoms of stress include ulcers, high blood pressure, arthritis, heart problems, skin conditions (i.e. acne) also Symptoms pertaining to mental/emotional health include irritation, lack of focus, anxiety, and depression. Study of chemistry of Stress reveals that during stress the brain is overloaded with powerful hormones that are intended only for short-term duty in emergency situations. Their cumulative effect damages and kills brain cells. In order to cope with Stress Ayurvedic, allopathic medicines are available but stress can be managed without the use of medicines by adopting alternative methods such as changing life style and by daily exercise.

KEY WORDS;

Stress, endorphins, exercise, meditation

Introduction

Stress is a major problem in modern society. Body fights the stress by involving both the nervous and endocrine system. First of all, the stress activates the pituitary glands which in turn signals an excess release of stress hormone like cortisone and adrenaline (by a pair of walnut sized glands atop the kidneys) which puts a body in state of alertness to act appropriately and less intensely to the stress-provoking events.

The stress hormone, adrenaline also stimulates the release of fatty acids and glucose into the blood stream with view to providing fuel to the "silently fatigued" muscles but this increase the risk of strokes and heart diseases among the stressed Fortunately, the brain has some built — in safety systems. Too much cortisol in the blood signals the brain and adrenal glands to decrease or stop Cortisol production. Under continuous stress, however, this feedback system breaks down.

Certain messages are carried by the brain's "HAPPY MESSENGERS" (SEROTONIN, NORADRENALIN, and DOPAMINE). Other messages are somber and quieting. They are carried by the brain's "SAD MESSENGERS". Most nerve centers receive input from both types of messengers. As long as this input is balanced, everything runs normally.

When too much stress is placed on the brain, the Happy Messengers begin to fail. Important nerve centers then receive mostly SAD MESSAGES, and the whole brain becomes distressed. The person enters a state of brain chemical imbalance known as -- OVERSTRESS.

With overstress people complain of being tired, unable to fall asleep or to obtain a restful night's sleep. They have plagues of aches and pains, lack of energy, lack of enjoyment of life. They feel depressed, anxious, or just unable to cope with life.

Without medicines Stress can be managed by Regular Exercise, Getting Enough Rest, Managing Mental Well-Being (meditation)

Regular exercise. Studies show that it is very effective at reducing fatigue, improving alertness and concentration, and at enhancing overall cognitive function. This can be especially helpful when stress has depleted energy or ability to concentrate. Exercise helps to deplete stress hormones and releases mood-enhancing chemicals which help us cope with stress better. Any form of physical activity leads to the release of these feel good neurotransmitters (endorphins), this leads to a feeling of euphoria, modulation of appetite and enhancement of immune response. This helps combat the negative effects of stress.

A comprehensive review of the relation between exercise and mood concluded that antidepressant and anxiolytic effects have been clearly demonstrated.[1]

The largest body of work in humans looking at the effect of exercise on tryptophan availability to the brain is concerned with the hypothesis that fatigue during exercise is associated with elevated brain tryptophan and serotonin synthesis. A large body of evidence supports the idea that exercise, including exercise to fatigue, is associated with an increase in plasma tryptophan and a decrease in the plasma level of the branched chain amino acids (BCAAs) leucine, isoleucine and valine [2-3]

The study by Perreau-Linck and colleagues [4] is the first to report that self-induced changes in mood can influence serotonin synthesis. This raises the possibility that the interaction between serotonin synthesis and mood may be 2-way, with serotonin influencing mood and mood influencing serotonin.

Manage Mental Well-Being-Meditation; it has an established role in calming down the stressed mind. It releases positive energy and thoughts which help neutralize the effects of depression. In one recent study, meditation was reported to increase release of dopamine. [5]

Exposure to bright light is a second possible approach to increasing serotonin without drugs. Bright light is, of course, a standard treatment for seasonal depression, but a few studies also suggest that it is an effective treatment for nonseasonal depression [6]

Proper Diet: Proper Diet could play a role in raising brain serotonin. According to some evidence, tryptophan, which increases brain serotonin in humans as in experimental animals,[7] is an effective antidepressant in mild-to-moderate depression.[8-9] Further, in healthy people with high trait irritability, it increases agreeableness, decreases quarrelsomeness and improves mood[10]

 α -Lactalbumin, a minor constituent of milk, is one protein that contains relatively more tryptophan than most proteins. Acute ingestion of α -lactalbumin by humans can improve mood and cognition in some circumstances, presumably owing to increased serotonin.[11-12]

CONCLUSIONS: Stress is unavoidable in modern society. The body warns about stress by displaying certain symptoms such as increased blood pressure, sweating, cold hands, palpitations and trembling of hands etc. these warnings or signals are the part of defence mechanism to the body to avoid stressful environment (stressor). Also our bodies are designed to react to our environment in an effort to preserve homeostasis. Stress levels rest largely on our own behavior and decisions and that we can optimize our bodies' responses to stress based on how we live our daily lives.

The effect of stressor can be reduced/avoided by strengthening will power or by changing life style or one may opt for taking medicines (ayurvedic/allopathic).

There are many drugs available for the anxiety in Ayurvedic treatment and Allopathic treatment but Anxiety medications aren't a cure. Medication may treat some symptoms of anxiety, but can't change the underlying issues and situations in your life that are making a person anxious.

There are many treatment alternatives to medication, one may need to change life style, it includes regular exercise, adequate sleep, and a healthy diet. Other effective treatments for anxiety include talk therapy and meditation.

The advantage of non-drug treatments for anxiety is that they produce lasting changes and long-term relief. If anxiety is so severe that it interferes with therapy, medication may be useful in the short-term to get your symptoms under control. Once your anxiety is at a manageable level, other forms of behaviour and talk therapy can be successfully pursued.

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