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Short Communication

Emotion Medicine

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Emotions are proven to be chemicals produced in the brain. Anger, Jealousy, hatred, depression, frustration, greed, hubris affecting mankind around the world with many diseases such as autoimmune diseases, psychological diseases, cancer, neurological diseases, heart diseases, headache, hypertension, blood presser, Alzheimer's disease and Parkinson's disease. A new branch of medicine to be included to deal with emotions in health and diseases.

Modern medicine deals with only human body without considering human mind treating with reductionist chemical drugs yields many adverse effects.

Chronic stress releasing hormones such as cortisol, noradrenaline, ACTH through CRH (corticotropin releasing hormone) from hypothalamus activating HPA axis by ANS involved in activation of immune mediators such as IL-1, TNF-α, IL-6. These immune mediators involved in activation of NF-KB, a key transcription factor, activation of this NF-KB a key transcription factor release various inflammatory mediators such as cytokines leads to immunomodulation (IL-10, IL-4, IL-5, TGF-β), hormonal imbalance, tumor progression (by cell proliferation (Cyclin D, Cyclin E), cell survival (BCL-2, BCL-XL), angiogenesis (IL-8, COX-2, VEGF), gene mutation (ROS, RNS, AID, Arginase 1), invasion and metastasis (Mmp's 2,9, UPA Urokinase plasminogen activator), Autoimmune diseases, and heart diseases.

Most of all diseases starts in human mind. Human mind is a consciousness, holographic representation of human body. Human mind is a huge canvas on which human thoughts are projected.

Chronic psychological stress induced release of adrenaline involved in vasoconstriction leads to hypertension, headache, and also adrenaline involved in release of glucose from the gunny bags of sugar stored in the liver.

Chronic psychological stress induced releasing hormones such as cortisol, noradrenaline, ACTH through CRH activating HPA axis via autonomic nervous system induced release of inflammatory mediators such as IL-1, TNF-α, IL-6 activating NF-KB, a key transcription factor involved in tumor progression. Chronic psychological stress induced release of ACTH activate T3, T4 and TSH involved in hormonal imbalance in thyroid disorder.

Chronic psychological stress induced release of stress releasing hormones such as IL-1, TNF-α and IL-6 activate NF-KB, a key transcription factor, dysregulated NF-KB transcription factor involved in conversion of Th1 lymphocytic type to Th2 lymphocytic type release IL-4, IL-5, IL-13 along with IL-17 involved in immunomodulation, tissue damage and chronic inflammation. Altered induced Tregs (iTregs) formed from TH1 cells mediated by TGF-β results in release of IL-10 involved in immunomodulation. Proteolytic enzymes such as UPA and Mmp's 2,9 involved in extracellular matrix degradation induced tissue damage. Growth factors such as EGF, FGF, VEGF involved in cell proliferation and cell survival by activation of STAT-3 transcription factor involved in autoimmune disease.

Happy hormones or neurotransmitters are oxytocin, serotonin, endorphin, dopamine activate innate and adaptive immune cells involved in immunostimulatory activity. Betaendorphin is a neuropeptide, abundant endomorphine, synthesize and stored in the anterior pituitary gland in response to physical stress and pain. Receptors of endorphins are situated on nervous system and immune cells. Betaendorphin binds with its μ receptors on innate and adaptive immune cells results in immunostimulatory activity involved in anti-inflammatory, antiviral, and stress buster activity, and antitumor activity.

Betaendorphins has analgesic activity by inhibiting substance P, a neurotransmitter of pain in the peripheral nervous system and in the CNS, betaendorphins binds with it's μ receptors on the CNS results in inhibition of GABA, release dopamine excitatory neurotransmitter involved in stress buster activity, analgesic activity, reward and addiction. Betaendorphins binds with it's μ receptors situated on the innate and adaptive immune cells results in activation of immune cells such as neutrophils, macrophages, mast cells, NK cells, DC, T and B cells involved in release of immune mediators such as IFN-γ, opsonin, granzyme-B and antibodies helpful in antiviral activity, anti-inflammatory activity, antitumor activity by inhibiting NF-KB, a key transcription factor involved in tumor progression and also by acting against P53 tumor suppressor gene.

Betaendorphin regulate the blood sugar levels by reducing the release of noradrenaline, a stress releasing hormone, which is involved in release of glucose from the liver to blood (Gluconeogenesis) increasing blood glucose level. Beta-endorphin helps in reducing the high blood pressure by reducing the release of adrenaline, a stress releasing hormone, which is involved in vasoconstriction leads to raise in blood pressure.

Thorough understanding of emotional hormones and neurotransmitters will be helpful for understanding health and diseases. In future emotional therapy will be useful for holistic management of diseases without adverse effects and inexpensive.

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