ABSTRACT

Everyone occasionally feels blue or sad. But these feelings are usually short-lived and pass within a couple of days. When you have depression, it interferes with daily life and causes pain for both you and those who care about you. Depression is a common but serious illness. Many people with a depressive illness never seek treatment. But the majority, even those with the most severe depression, can get better with treatment. Medications, psychotherapies, and other methods can effectively treat people with depression. Depressive illnesses are disorders of the brain. Brain-imaging technologies, such as magnetic resonance imaging (MRI), have shown that the brains of people who have depression look different than those of people without depression. The parts of the brain involved in mood, thinking, sleep, appetite, and behavior appear different. But these images do not reveal why the depression has occurred. They also cannot be used to diagnose depression. Some types of depression tend to run in families. However, depression can occur in people without family histories of depression too. Scientists are studying certain genes that may make some people more prone to depression. Some genetics research indicates that risk for depression results from the influence of several genes acting together with environmental or other factors. In addition, trauma, loss of a loved one, a difficult relationship, or any stressful situation may trigger a depressive episode. Other depressive episodes may occur with or without an obvious trigger. In Ayurveda agni has been given prime importance and due to intake of unwholesome diet the person develops various kind of GIT disturbances and lead to accumulation of various waste accumulated in various channels of the body and manifests as different systemic symptoms pertaining to respective symptoms and depression is one among that. GIT and nervous system has few of common
neurotransmitter such as serotonin which when disturbed in GIT will definitely in turns lead to various alteration in the nervous system and manifesting as the depression. Thus there was a wise and intelligent effort has been done to make the bridge between the aetiology as AAMA and depression to a greater extent.

**KEYWORDS:** Aama, Indigestion, Agni, Depression, Neurotransmitters.

**INTRODUCTION**

The normal ups and downs of life mean that everyone feels sad or has "the blues" from time to time. But if emptiness and despair have taken hold of your life and won't go away, you may have depression. Depression makes it tough to function and enjoy life like you once did. Just getting through the day can be overwhelming. But no matter how hopeless you feel, you can get better. Understanding the signs, symptoms, causes, and treatment of depression is the first step to overcoming the problem.

A literal ton of research has been done on the causes of depression. Below is a brief discussion of the multiple biological, psychological and social factors that have been identified as being related to the development of depression. In context of the Diathesis-Stress hypothesis, the biological factors typically function as diatheses, the psychological factors may serve as diatheses or stressors, and sociological factors tend to function as stressors or triggers.

**Biology of Depression**

You may have heard that depression is the result of a simple imbalance of brain chemicals. Although brain chemicals are certainly part of the cause, this explanation is too simplistic. Even just considering the biological dimension of depression, the brain has multiple layers of complexity.

**Neurochemistry**

**Neurotransmitters**

The brain uses a number of chemicals as messengers to communicate with other parts of itself and with the nervous system. These chemical messengers, called neurotransmitters, are released and received by the brain’s many nerve cells, which are also called neurons. Neurons are constantly communicating with each other by way of exchanging neurotransmitters. This communication system is essential to all of the brain’s functions.
Role of Neurotransmitter

The Four Major Neurotransmitters and the Neurotransmitter Imbalances

Neurons are not in direct contact with each other; in order to communicate with each other, they rely on highly specialized chemicals called neurotransmitters. Neurotransmitters are chemical messengers that coordinate the transmission of signals from one nerve cell (neuron) to the next. These all important brain chemicals interact with target sites called receptors located throughout the brain (and body) to regulate a wide variety of processes including emotions, fear, pleasure, joy, anger, mood, memory, cognition, attention, concentration, alertness, energy, appetite, cravings, sleep, and the perception of pain.

GABA

GABA (Gamma amino butyric acid) is your major inhibitory/calming neurotransmitter in the central nervous system. It is often considered to act as "mother nature's Xanax." Indeed, it is thought the GABA system that most sedatives, prescription sleep aids, and tranquilizers work. It helps the neurons recover after firing and thereby reduces anxiety, worry, and fretfulness. In addition, GABA regulates norepinephrine, adrenaline, dopamine, and serotonin, it is a significant mood modulator.

Serotonin

The other major inhibitory neurotransmitter, serotonin, is deemed to be the master neurotransmitter. Serotonin imbalance is one of the most often cited contributors to depression and other mood disorders. It is also intimately tied to many biological processes such as sleep, appetite, pain, digestion, and generalized well-being. Serotonin is critical to feelings of self-worth and happiness and helps protect against both depression and anxiety. Sustain levels of high stress, lack of sleep, poor nutrition, inflammation, genetic mutations, and certain prescription medications can slowly erode your levels of serotonin leading to depression, worry, insomnia, obsessive thoughts, compulsive behaviors, carbohydrate cravings, PMS, and exaggerated response to pain.

Dopamine

Dopamine functions as both an inhibitory and excitatory neurotransmitter depending upon where in the brain and at which particular receptor site it binds to. Adequate dopamine levels are needed to allow us to focus our attention in the moment and attend to matters at hand (remember that attention deficit is at least in part due to low dopamine). Dopamine is the
main player in regulating our reward circuitry and pleasure centers (hence dopamine's role in addictions). This all important brain chemical is also critical for memory and motor skills.

**Norepinephrine (NE)**
Norepinephrine, also known as Nor-Adrenaline, is widely distributed throughout your brain and body. It operates as a neuromodulator that boosts the function of many different cell types to optimize your brain's performance. This is accomplished via two modes of norepinephrine release: burst and tonic firing. Through burst firing, NE takes part in your ancient and elegant fight-or-flight survival mechanism providing rapid and accurate assessment of danger and opportunity. Excessive burst firing of NE, logically, especially if no actual life threatening danger exists, can leave you anxious, vigilant, hyperactive, miserable, and annoying to be around.

**Epinephrine**
Epinephrine also known as adrenaline is a neurotransmitter and hormone essential to metabolism. It regulates attention, mental focus, arousal, and cognition. It also inhibits insulin excretion and raises the amounts of fatty acids in the blood.

**Glutamate**
Glutamate is the major excitatory neurotransmitter in the brain. It is required for learning and memory. Low levels can lead to tiredness and poor brain activity. Increased levels of glutamate can cause death to the neurons (nerve cells) in the brain. Dysfunction in glutamate levels are involved in many neurodegenerative diseases such as Alzheimer's disease, Parkinson's, Huntington's, and Tourette's. High levels also contribute to Depression, OCD, and Autism.

**Histamine**
Histamine is most commonly known for it's role in allergic reactions but it is also involved in neurotransmission and can affect your emotions and behavior as well. Histamine helps control the sleep-wake cycle and promotes the release of epinephrine and norepinephrine. High histamine levels have been linked to obsessive compulsive tendencies, depression, and headaches. Low histamine levels can contribute to paranoia, low libido, fatigue, and medication sensitivities.
Low Serotonin and Gastrointestinal Disorders

Serotonin is one of our neurotransmitters that are responsible for our mood. If our serotonin levels fall off we may experience anxiety and depression. These receptor sites are actually targets for medications when treating diarrhea and nausea. 5-HT (3) receptor antagonists are used during chemotherapy treatment to help alleviate symptoms and 5-HT (4) agonists are used to help treat constipation (Costedio, 2007). Therefore, if we have too little, or too much serotonin floating around we can experience all kinds of common gut issues.

Selective Serotonin Reuptake Inhibitors (SSRIs) are the most commonly prescribed antidepressants. They too work upon the same serotonin pathways to help aid in depression. Common side effects of SSRIs are nausea, diarrhea, and nervousness. All issues associated with improper levels of plasma 5-HT receptors.

The various above said study which has been done suggest that there is connection between the brain and gut called brain gut axis.

Now let’s consider the importance of Aama as a aetiology factor for the depression and symptoms of aama in the body.

As per the reference quoted in the Astanga Hrudyam sootra sthana suggest that the main aetiological factor to cuase AAMA is the agni whenever there is reduction and alteration in the digestive fire/ Jatharagni leads to incomplete and inadequate digestion causing the formation of AAMA.

The symptoms which can be shown in patient due to AAMA as follows - - -
As per Madhava nidna – the consumed food is incompletely digested and hence cannot be assimilated. The resultant product has foul odour, and is too slimy – that cannot be absorbed through srotas and produce malaise due to PREERANABHAVA the characteristic property of AAMA.

The general sign symptoms of the AAMA explained in the astanga hrudayam sootra sthana as follows – the obstruction to the channels, loss of strength heaviness, statis of vayu leaziness, indigestion, spitting, retention of excreta, anorexia and exhaustion are the features of SAAMA.
The features explained in the depression such as melancholia exactly correlates with the characteristic features of AAMA such tantuvat, picchil, durgandh etc.

Hence the treatment adopted should be directed to the AAMA pachana rather than other symptomatic management and results will be expected always fruitful.

**CONCLUSION**

Depression is not a disease it’s a entitled to give the person who had low self esteem, feeling dull, inorganic systemic complaints which has its own remission and relapse.

The root cause for this is the AGNI, once the agni is corrected there will be proper functioning of the all the doshas and formation of dhatu and mala. Once agni regain the normal functioning digest all the AAMA residue in the different channels and passages and functioning of the srotas can be retained in toto the person can be relieved with the symptoms of the depression.

**REFERENCES**