

ANATOMICAL AND PHYSIOLOGICAL UNDERSTANDING OF DEPRESSION (VISHADA) IN PURVIEW OF AYURVEDA - A SYSTEMATIC REVIEW

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ABSTRACT

Depression is a long term relapsing condition associated with high levels of disability and mortality. It is associated with functional and anatomical brain abnormalities. According to WHO, Depression is a common mental disorder characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by inability to carry out daily activities, for at least two weeks. Globally, over 300 million individuals of all ages suffer from depression. It is a major contributor to overall global burden of disease. Ayurveda mentions depression as *Vishada* or *Manoavsada*. *Vishada* is mentioned as one of the *Manasik Rogas* in our ayurvedic texts. *Acharya Dalhana* defines *Vishada* as a condition originated from apprehension of failure resulting into incapability of mind and body to function properly. Depression is mentioned in Ayurveda in various scattered references. Understanding the structural and anatomical deformities in Depression or *Vishada* will lead to better understanding of the disease and ultimately better management of disease and patient care.

Keywords: Anatomy, Depression, *Ayurveda*, *Vishada*, *Manoavsada*.

INTRODUCTION

Depression is a serious mental health condition which affects around 300 million people worldwide. Most of the cases of depression (more than 80%) are left untreated. According to WHO, Depression is expected to account for more lost years of healthy life than other disease by 2030 except HIV-AIDS. It is a common mental disorder presented with depressed mood, loss of interest or pleasure, feeling guilty, disturbed sleep and low power of concentration.¹

Avasada and *Vishada* are two main diseases mentioned in ayurvedic texts which are closely similar to depression. *Avasada* is aggravation of *Kapha dosha* relating to *kapha* as pathological factor.² *Avasada*, also known as *avasama*, *vishada*, *sadnam*. It is mentioned in Ayurvedic classics in the context of *Manas dosha vikara*.

Person who recurrently suffers from *chittodwega*, *kama*, *krodha*, *lobha* etc. *Mansika Vikaras* are more

prone to suffer from *Unmada*.³ *Vishada* is *vata nanatmaja vikara*.⁴ *Vishada* is *shrestha rogvardhak bhava*.⁵

AIM: Understanding the Ayurvedic concept related to depression.

OBJECTIVES: Understanding and reviewing the anatomy and physiology of depression.

LITERARY REVIEW

Asiddhibhayat vividheshu karmeshu apravriddhi vishada.⁶

Dalhana defines *Vishada* as a condition originated from apprehension of failure resulting into incapability of mind and body to function properly. There is a

major reduction in both the activities. This condition arises out of low self-worth. Low self-worth results in low performance expectation that again ends up in high anxiety (*Udvignata*) and reduced effort (*Apravriddhi*).

DEFINITION OF VISHADA

- *Shabda Kalpadruma* and *Vachaspatyam* refer to *Vishada* as *Avasada*
Vishada = *Manoavsada* = *Swakarya* = *Akshamatva* = Inability of mind to perform its routine functions effectively (*Vachaspatyam*).⁷
- *Monier Williams* gives the meaning of *Vishada* as drooping state, lassitude, depression, languor.⁸

Samprapti Ghataks of Vishada

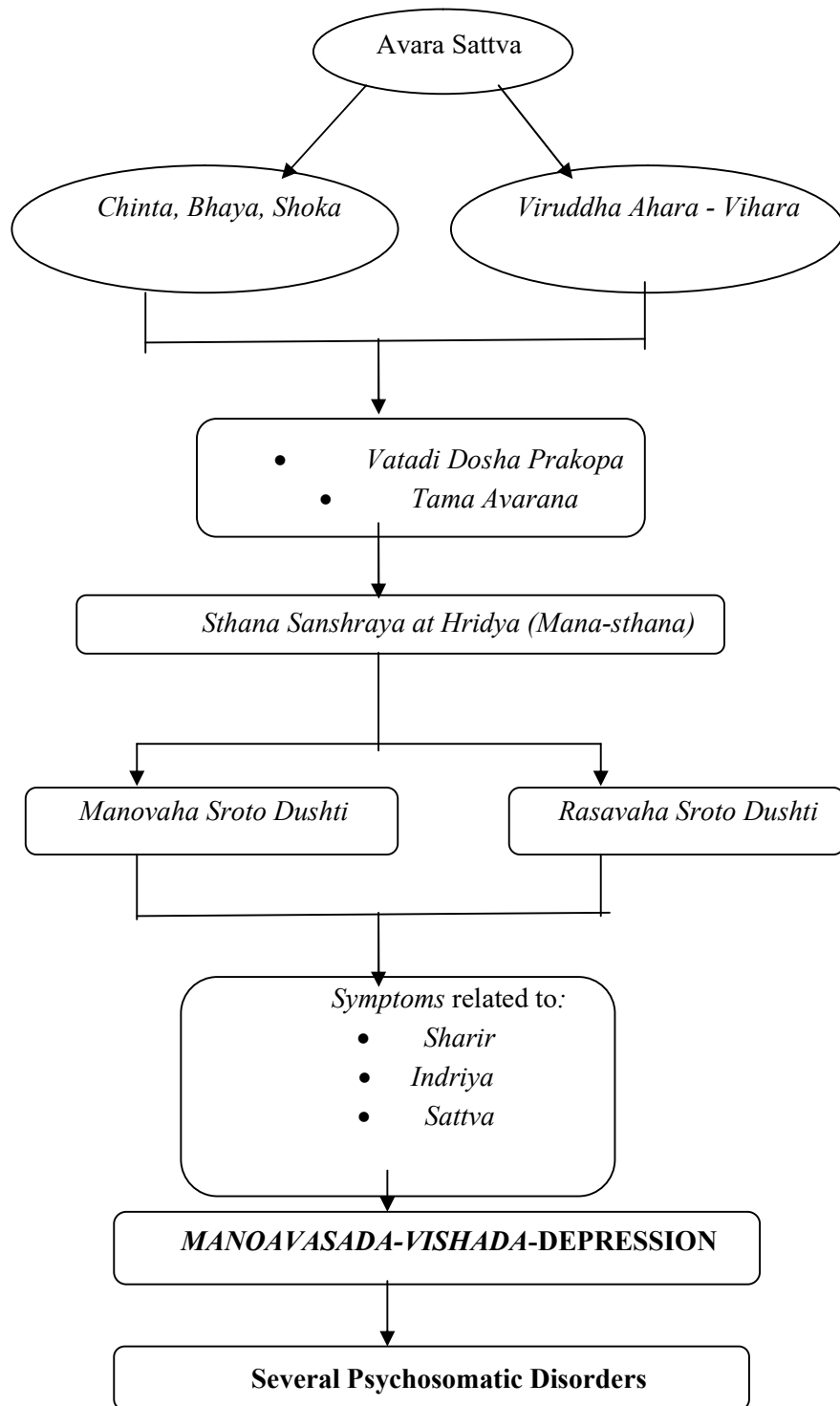
<i>Dosha</i>	<i>Manasa - Rajas, Tamas (Predominantly Rajas) Sharira - Vata, Pitta (Predominantly Vata)</i>
<i>Dushya</i>	<i>Manasa, Sarvadhātu</i>
<i>Srotas</i>	<i>Manovaha Srotas (specifically)</i>
<i>Agni</i>	<i>Jatharagni</i>
<i>Udbhavasthaana</i>	<i>Manasa (Hridaya)</i>
<i>Adhistaana</i>	<i>Hridaya (Shirohridaya)</i>
<i>Vyaktisthana</i>	<i>Manasa, Sarvasharira</i>
<i>Purvarupa</i>	<i>Alpavyakta</i>
<i>Rupa</i>	<i>Manasika - Mano bhraman, Anavasthitachitta, Avsaada, Atmano Ashakta Jananam, Chittodvega, Asiddhi bhayat apravriddhi, etc Sharirika- Vepathu, Prasveda, Romaharsha, Gatrasaada, Mukhshosha, etc</i>
<i>Rogamarga</i>	<i>Madhyam</i>

SAMPRAPTI OF VISHADA

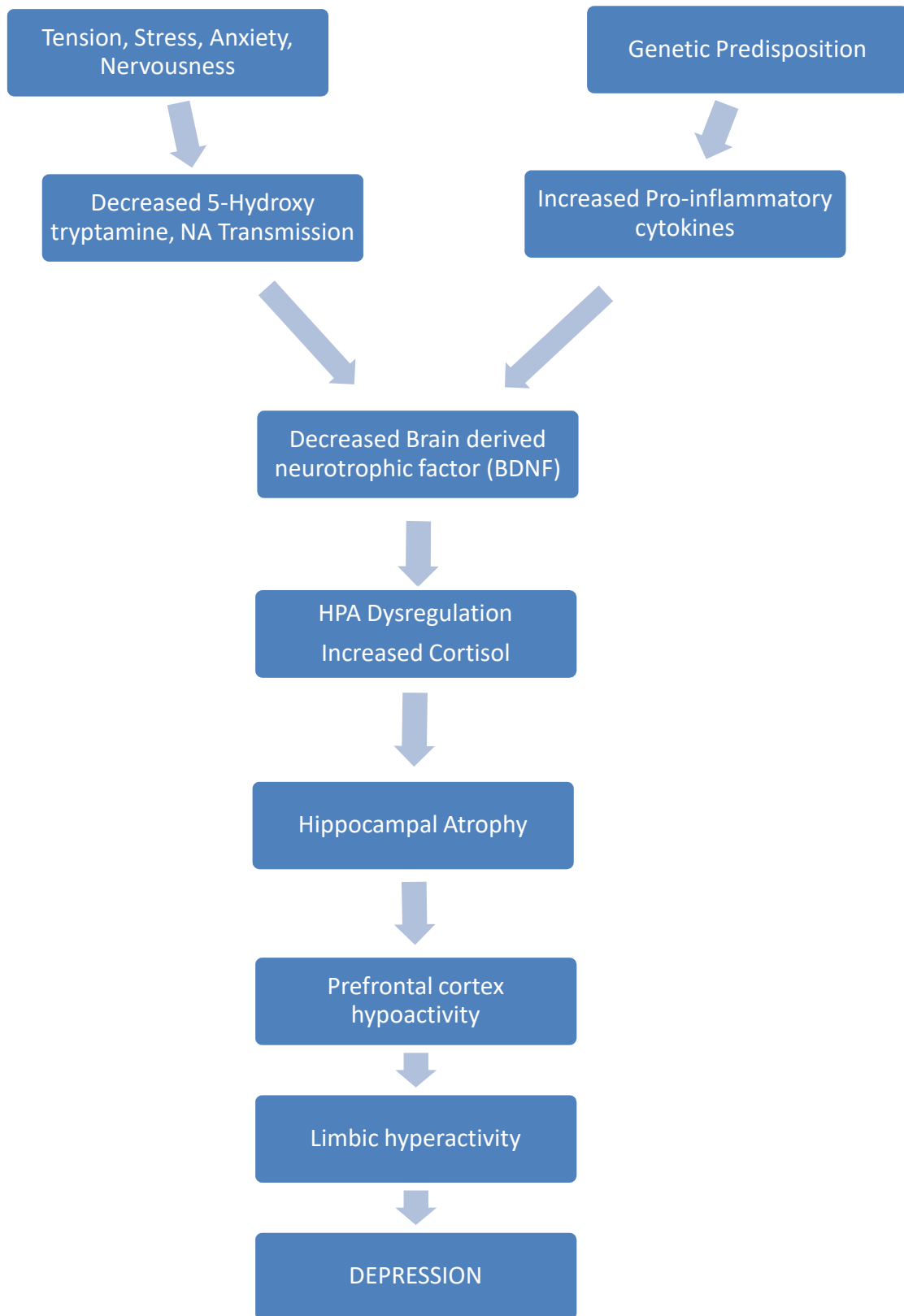
- *Vishada* is mentioned under *Manasika roga* in our classical texts.
- It is caused by vitiation of *Vata (Sharirika dosha)* and *Raja (Manasika dosha)*. Vitiation of *Vata* and

Raja gets seated in *Hridya* (Heart) and ultimately causes vitiation of mind (*Vibhrama*) which finally leads to *Vishada*.

AYURVEDIC UNDERSTANDING OF DEPRESSION



SCHEMATIC REPRESENTATION OF DEPRESSION⁹



ANATOMICAL STRUCTURES INVOLVED IN DEPRESSION ALONG WITH THEIR FUNCTION

Anatomical Structure	Function
1. Prefrontal Cortex	Planning complex cognitive behavior, personality expression, decision making and moderating social behaviour. ¹⁰
2. Ventral Striatum	Functions as a part of Reward System, facilitating voluntary movements. ¹¹
3. Ventral Pallidum	Involved in addiction, pleasure, regulation of behavior, emotions & motivational salience. ¹²
4. Medial Thalamus	Relaying of sensory signals, including motor signals to the cerebral cortex, and the regulation of consciousness, sleep, and alertness. ¹³
5. Amygdala	Primary role in the processing of memory, decision-making and emotional responses (including fear, anxiety, and aggression). ¹⁴
6. Entorhinal Cortex (Parahippocampal Gyrus)	Memory, navigation & perception of time. ¹⁵
7. Hippocampus	Regulates emotions, associated with long term memory & spatial navigation. ¹⁶
8. Hypothalamus	Synthesizes and secretes neurohormones (hypothalamic-releasing hormones), regulates the secretion of pituitary hormones. ¹⁷
9. Anterior Pituitary	Regulates several physiological processes including stress, growth, reproduction & lactation. ¹⁸
10. Adrenal Gland	Secretes Mineralocorticoids, Glucocorticoids, Gonadocorticoids. Control blood sugar, regulate blood pressure, burn protein & fat, react to stressors like major illness or injury. ¹⁹

RESULT

Brain structures and their connections are responsible for maintaining emotional stability and their deformity and malfunction leading to the pathophysiology of depression.

CONCLUSION

Depression is a disease of multiple aetiological factors and multiple anatomical brain structures with their functions are involved in its pathophysiology. It causes mental instability and interferes with people's ability to perform daily routine work. At worst depression leads to suicide.

Based on the systemic review of anatomical and physiological concepts related to depression (*vishada*), it can be concluded that depression is a result on tension, stress, anxiety, nervousness and sometimes genetic predisposition which hampers the normal brain anatomy and physiology and their deformity and malfunction further leads to depression.

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