

HERBAL DRUG TREATMENT ON KRODH (ANGER) – A REVIEW STUDY

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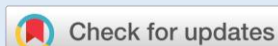
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ABSTRACT

Psychiatry is a branch which is yet to be explored in Ayurveda. The existing medicines used in Modern system of medicine have serious adverse effects. Hence it is the need of the hour to explore medicines in this context. In Ayurveda *Manovaha srotas* deals with mind and psychology. Components of *Manovaha srotas* include Pran Vayu, *Udaan Vayu*, *Vyaan Vayu*, *Sadhak Pitta* and *Tarpak kaph*. Abnormality in any of these components disturbs mind and causes various psychological disorders. *Sadhak Pitta* – a subtype of *Pitta Dosh* is associated with mind and emotions. Emotions like courage, fear, anger, happiness comes under the influence of *Sadhak Pitta*. Variations in these emotions are the root cause of any psychological imbalance. In this study an attempt is made to study *Krodh* (anger) in detail and to explore the probable *Dravya* (Herbal drugs) which can be used to treat anger. Although Yoga and *Aachar Rasayan* described in Ayurveda have a great influence on emotions and mind, this study attempts to find herbal drugs acting on the Anger emotion as per Ayurveda. The study was carried out by reviewing various *Ayurvedic Samhitas* and *Nighantus* along with corresponding Modern Research articles on it. The aim of this study is to collect the scattered information of *Dravya* (Herbal Drugs) mentioned in the *samhitas* which can be used to treat anger emotion and make them available for further research under one single platform. A total of 6 drugs are studied in this study.

Keywords: Ayurveda, Psychiatry, *Manovaha srotas*, Emotions, Anger, *Dravya*, Herbal Drugs.

INTRODUCTION

For all individuals, mental, physical and social health are vital and interwoven strands of life¹. Health is defined as a state of physical, mental and social wellbeing in which disease and infirmity are absent². Now days the percentage of people suffering from Mental health problems is increasing. Changing lifestyle and increased levels of stress caused while adapting to these changes has taken a toll on mental health of people. Unfortunately, not much importance and attention is given to mental health as it is given to physical health maybe because of social stigma and unacceptance. As many as 450 million people suffer from a mental or behavioral disorder¹. [The psychiatric drugs are designed to correct underlying neuropathological disease processes by restoring neural communication by modulating the brain's chemical messengers and neurotransmitters. These changes can be accompanied by debilitating neurological impairments and life-threatening effects. Given the pervasiveness of their use, psychiatric medication can either alleviate or exacerbate mental illness. One reason behind the mixed success of psychiatric medication stems from the fact that the mechanisms by which they modify the brain operations are poorly understood.]³ Hence it is need of the day to explore alternative medicines in this field which have minimal or no adverse effects.

There is a vast scope for exploring Psychiatry in Ayurveda. Because the emotions influence behavior to a large extent, it is need of the hour to find medicines working on emotions to prevent behavioral disorders. Anger is a primary human emotion we all experience from time to time⁴. Anger is felt when we feel threatened due to physical conflict, injustice, humiliation or betrayal. It is rightly said that 'Overcome angry by non-anger, overcome the wicked by goodness, overcome the miser by generosity, overcome the liar by truth'⁵. The physiology of anger is studied and herbal drugs which can act on this emotion are explored in this study.

Materials and Methods

Literature review done from *Charak Samhita*, *Sushrut Samhita*, *Vagbhat* and their tika along with *Bhav prakash Nighantu* and other *Dravyagun Granthas*.

Aim and Objectives

1. To study anger emotion in detail.
2. To find probable Ayurvedic drugs acting on anger emotion.
3. To make probable comparison of these Ayurvedic drugs with Modern research on these drugs and find their correlation if any.

Literature Review

As per *Charak chakrapani tika*, *Krodh* is defined as *Krodhaha Pradvesho yena Prajvalitam Iva aatmanam manyate*⁶ which means Jealousy which burns the soul like fire is called anger. As per Ayurveda, *Krodh* is an emotion influenced by *Raj gun* and *Pitta Dosh*⁷. As per *Paanchabhautikatva*, Anger or *Krodh* is described as '*Aagneya*'⁸. *Charak* describes effects of Anger on our body. He says angry person suffers from following⁹.

- 1) *Maans shithilata* (Muscle laxity).
- 2) *Vimuchyati sandhi* (Redemption of joints).
- 3) *Rakta Vidaaha* (Increased heat in blood).
- 4) *Med Vilayan* (Melting of fats).
- 5) *Majja kshay in sandhi asthi* (Bones and joints become hollow).
- 6) Decreased *Shukrastraav* or decreased *shukrotpatti* (Decreased sperm count or decreased semen secretion).
- 7) *Oaj kshay* (Decreased *oaj*).

Apart from these symptoms, Ayurveda also describes Anger as a cause of *Paalinya*¹⁰ (Graying of hair), *Vyanga*¹¹ (Melasma), *Pittaj Headache*¹² (Headache because of vitiated *Pitta dosh*), *Rakta dushti*¹³ (Vitiation of blood), *Pittaj Prameha*¹⁴, *Pittaj Jwar*¹⁵, Depression¹⁶, *Raktapitta*¹⁷ (Epistaxis), *Shukra dushti hetu*¹⁸, *Stanya dushti hetu*¹⁹.

So as per Ayurvedic physiology while finding herbal drugs for *Krodh* emotion, we need to find drugs satisfying 3 Criteria-

1) Drugs acting on mind. (Since Mind is described as *adhistaan* of *krodh*²⁰)

2) Drugs decreasing *Rajo gun*⁷ (*Satva gun pradhaan*).

3) Drugs decreasing *tikshna gun* of *Pitta* since it is *Aagneya*⁸ (*Saumya/manda* drugs).

Now as per Modern Physiology of Anger, the mechanism occurring in our body when a person is angry is as follows-

When a person becomes angry, neurotransmitter chemicals known as Catecholamines (Dopamine, Nor epinephrine, Serotonin) are released in the brain causing burst of energy lasting for several minutes²¹. At the same time heart accelerates, Blood pressure rises, rate of breathing increases. In quick succession, additional brain neurotransmitters and hormones (Adrenaline and nor adrenaline) are released which trigger a lasting state of arousal²¹. The brain chemical serotonin has long been known to play an important role in regulating anger and aggression²². Decrease in Serotonin

concentration leads to Anger and Aggressive behavior²². In animal studies treatment with selective serotonin receptor agonist compound has been found to restore normal functioning of these receptors and suppress aggressive behavior. The substrate for both fear and anger is nor epinephrine²³. Nor epinephrine release induces fight (anger) or flight (fear). Fear and Anger are twin emotions coming from the same neuromodulator nor epinephrine and they always come together at a stress²³. Nor epinephrine and Dopamine are usually released to induce anger. Acetylcholine is a cognitive part of emotion which gives the subject a calming and soothing effect.

So as per Modern physiology while finding drugs for anger emotion we need to find drugs satisfying any of the following 2 criteria-

- 1) Drugs increasing level of serotonin.
- 2) Drugs increasing Acetylcholine (Drugs inhibiting the activity of Acetyl cholinesterase).

Probable Ayurvedic Drugs acting on Anger emotion and their Modern correlation.

NAME	Ayurvedic view	Modern Drug research
1) Aamra Latin name- Mangifera indica	Properties- <i>Madhur-Sheet-Madhur Guru Snigdha</i> ²⁴ . Because of these properties, it is decreases vitiated <i>raj gun</i> of <i>Vaat dosh</i> and <i>tikshna gun</i> of <i>Pitta</i> . Also, it acts on mind and hence further research needs to be done if this drug can be used on anger.	It can cause modulation of mood via interaction with serotonin receptors and dopamine receptors ²⁵ . Also, it contains COMT which inhibits Adrenaline and can be used to treat mood and addiction disorders ²⁵ .
2) Kadali Latin name- Musa acuminata	Properties- <i>Madhur-Sheet-Madhur Guru Snigdha</i> ²⁶ . <i>Majja Dhatu Shamak</i> (Soothes the nervous system) Because of these properties it decreases vitiated <i>Vaat</i> and <i>pitta dosh</i> and hence can be used in treatment of anger.	It inhibits the activity of the enzyme acetyl cholinesterase and thus makes acetylcholine available which has a calm and soothing effect on body ²⁷ . Also, it contains Serotonin and nor epinephrine in Fruit pulp which helps in soothing anger ²⁸ .
3) Chanchu Latin name- Corchorus depressus .	Properties- <i>Madhur-Sheet-Madhur Guru Snigdha Pichhil Tridosh shamak</i> ²⁹ . Because of these properties it decreases <i>Vaat</i> and <i>pitta dosh</i> and hence can be used in treatment of anger.	It inhibits the activities of acetyl cholinesterase and thus makes acetylcholine available which has a calm and soothing effect on body ³⁰ .
4) Draaksha Latin name- Vitis vinifera .	Properties- <i>Madhur-Sheet-Madhur Guru Snigdha Mrudu</i> ³¹ . Because of these properties it decreases <i>tikshna gun</i> of <i>pitta</i> ; also, it is decreases	<i>Vitis vinifera</i> increases level of serotonin and Nor Adrenaline and thus helps in soothing and calming a person and effectively decreases bursts of anger ³² . <i>Vitis vinifera</i> juice increases levels of both Serotonin and nor adrenaline ³³ .

	Vaat dosh and hence can be used in the treatment of anger.	
5) Naarikel Latin Name- Cocos nucifera	Properties- <i>Madhur-Sheet-Madhur Guru Snigdha Majja Dhatu Balya</i> ³⁴ (Strengthens the nervous system) Because of these properties it can help in treating anger.	It increases the level of serotonin and thus soothes anger and aggression ³⁵ . Also, Young coconut water ameliorates depression via modulation of Neurotransmitters which means it has a soothing effect on mind ³⁶ .
6) Bala Latin Name- Sida cordifolia	Properties- <i>Madhur-Sheet-Madhur Guru Snigdha Pichhil Vaat Pitta shamak</i> ³⁷ . Because of these properties it can help in soothing anger.	It inhibits the activity of Acetyl cholinesterase and hence makes acetylcholine available which has a calm and soothing effect on body ³⁸ .

DISCUSSION

1) As per Ayurvedic Physiology, Anger (*Krodh*) is vitiation of *Shaarir dosh Pitta* by *Tikshna Ushna gun* and vitiation of *Manas dosh Raj*.

2) As per Modern Physiology, Neurotransmitter chemicals called Catecholamines (Dopamine, nor epinephrine and Serotonin) are released in brain causing burst of anger emotion.

3) Also decrease in Serotonin concentration in brain causes anger and aggression.

4) In this study, probable herbal drugs acting on *Krodh* by Ayurvedic physiology as well as acting on Anger by Modern Physiology are selected and studied.

5) Probable comparison is made of the same drug as per both Ayurvedic and Modern Physiology. Probable Ayurvedic drugs are selected and corresponding modern correlation and research done on them is studied.

6) All probable drugs acting on Anger emotion are brought together under one single platform and made available for further research.

CONCLUSION

Anger emotion is studied in detail as per both Ayurveda and Modern system of medicine and a list of probable drugs acting on them is made. Only drugs satisfying both Ayurvedic and Modern criteria are selected. Although these drugs may probably act on anger emotion; only Drug therapy is not sufficient in the treatment of psychological disorders. Cultivation or training of mind is equally important. Developing

Maitreebhav vritti (Metta) i.e. love, kindness, empathy is also required. All this comes under *Satvavajay chikitsa* in Ayurveda. Also maintaining *Dhaatusamyata* i.e. balance of *Shaarir* as well as *Maanas doshas* plays a vital role. From Modern point of view, REBT (Rational Emotive Behavior Therapy), CBT (Cognitive Behavior Therapy), Gestalt Therapy etc. play an important role. Further research needs to be done to check the validity of these drugs in this context so that these drugs can be used along with the *Satvavajay chikitsa* in Ayurveda to give better results in emotional disorders.

Conflict of Interest- None declared.

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