

Role of Annavaha Srotas and Rasavaha Srotas in Psychiatric Illness: An Ayurvedic Perspective

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Abstract—Psychiatric illnesses, though primarily manifested at the level of mind, demonstrate deep-rooted connections with fundamental bodily systems as described in Ayurveda. Among these, Annavaha Srotas (the channels responsible for intake, digestion, and transportation of food) and Rasavaha Srotas (the channels governing the formation and circulation of rasa dhatu the primary nourishing essence) play a crucial regulatory role in mental health. This abstract provides an integrative understanding of how disturbances in these srotas contribute to the pathogenesis of psychiatric disorders. Annavaha Srotas, originating from the Amasaya (stomach) and Anna-vahini dhamanis, are responsible for proper digestion (Agni vyapara) and transformation of food. Impairment of Agni leads to the formation of Ama, which circulates through the body and obstructs channels, including those associated with mental function. Ama-induced derangements disturb Vata and Rasa-Rakta circulation, leading to symptoms such as anxiety, mood disturbances, irritability, mental clouding, and cognitive deficits. Chronic digestive disturbances also affect the production of essential neurotransmitter precursors, highlighting the gut–brain axis parallel in modern science.

Rasavaha Srotas, rooted in the Hrudaya (heart) and Dasha dhamanis, nourish all tissues including Manas. When RasaDhatu is pure, abundant, and well-circulated, it promotes mental clarity, emotional stability, and balanced sensory perception. Disorders of Rasavaha Srotas due to improper diet (Ahara), emotional stress, lifestyle errors, or systemic diseases result in Dhatu kshaya, malnourishment of the brain, and impaired functioning of Manovaha Srotas. This manifests as depression, fatigue, memory loss, emotional instability, and attention disturbances. Rasavaha dysfunction also aggravates Vata-related imbalances, further affecting psychological harmony. Modern perspectives correlate these Ayurvedic concepts with gastrointestinal dysfunction, malabsorption, microbiome imbalance, inflammatory mediators, circulatory irregularities, and

neurohumoral dysregulation. Evidence suggests that chronic digestive impairment leads to neuroinflammation and altered neurotransmission, while impaired circulation affects oxygen and nutrient supply to the brain. Understanding psychiatric illness through the lens of Annavaha and Rasavaha Srotas provides a holistic approach to prevention and treatment. Ayurvedic management focusing on Agni deepana, Ama pachana, Rasayana therapy, dietary correction, lifestyle regulation, and mind-calming interventions can significantly enhance overall mental well-being.

Index Terms—Annavaha Srotas, Rasavaha Srotas, psychiatric illness, Agni, Ama, Rasa Dhatu, Manovaha Srotas, Ayurveda, gut–brain axis.

I. INTRODUCTION

Ayurveda, the ancient science of life, emphasizes that physical, mental, and spiritual health are interdependent aspects of a single continuum. Manasika Swasthya (mental health) is described as a state of balance among the Tridosha, Dhatu, Mala, and the three Manasika Gunas Sattva, Rajas, and Tamas¹. Disturbance in any of these leads to Manasika Vikara (psychiatric disorders). Ayurveda views these disorders as psychosomatic in nature, arising from an intricate interaction between body (Sharira) and mind (Manas). The numerous Srotas (body channels) responsible for maintaining physiological harmony, the Annavaha Srotas and Rasavaha Srotas hold special importance. The Annavaha Srotas, with its root in the Amashaya (stomach) and Vamaparsva (left abdominal region), governs digestion, assimilation, and the initial transformation of food. The Rasavaha Srotas, rooted in the Hrudaya (heart) and Dasa Dhamanis, is responsible for the circulation and nourishment of

Rasa Dhatu the first tissue formed from digested food and the substratum of life and consciousness. Any derangement in these channels leads to Agnimandya (impaired digestion) and Ama utpatti (toxin formation), resulting in defective Rasa Dhatu that fails to nourish both body and mind. This Rasa Dushti affects the Satva quality of the mind and manifests as anxiety, depression, irritability, or other Manasika Vikaras. Modern science parallels this Ayurvedic concept through the gut-brain axis, recognizing that gastrointestinal dysfunction and altered nutrient flow can influence neurotransmitter synthesis and emotional behavior.

Understanding the role of Annavaha and Rasavaha Srotas in psychiatric illness thus provides an integrative view of how digestion and circulation directly affect mental equilibrium. Such insight bridges classical Ayurvedic physiology with contemporary psychoneuro-gastroenterology, opening new avenues for holistic management of psychiatric disorders.

II. STROTAS

“स्त्रवनातस्त्रोतांसि “ सु.सु ३०/१२

The term Srotas is derived from the root “Susravana” meaning to exude, to ooze, to flow, to filter. From which sravana or flow of the body substances takes place or those through which the materials flow in the body are called Srotas. Thus, they are the channels or pathways of the body through which the materials needed for tissue building, nutrition and other nutrients flow from one corner of the body to the other. In other words, materials are transported through these Srotas from the place of production to the place of need. Srotas are the complex pathways or channels of the nervous system governed by Vayu for carrying out the functional and physiological activities of the human body. The following synonyms of Srotas Sira (Vein), Dhamani (Artery), Rasayani (Lymphatics ducts), Rasavahini (capillary), Nadi (Tubular conduits), Pantha (Passages), Marga (Pathways), Sharirachidra (Body orifices), Ashaya (Repertories), Niketa (resorts), Sthanas (Sites), Samvrat samvratani (open / closed passages).

1. Annavaha Srotas:

According to Acharya Charak the Moolstan of Annavaha strotas is,

“अन्नवहस्तोतस्

अन्नवहानांस्तोतसांआमाशयोमूलं वामचपाश्र्वम्”।च.वि ५/७

- Amashya it can be correlated with stomach.
- Vamaparshwa it can be correlated with left side of abdomen.

According to Acharya Sushrut the Moolstan of Annavaha strotas is

“अन्नवहेद्रे, तयोर्मूलमामाशयोऽन्नवाहिन्यश्वधमन्यः”।सु.शा ९/१२

- Amashya it can be correlated with stomach.
- Annavahidhamanya it can be correlated with the gastrointestinal tract.

“Anna” means food, and “Vaha” means carrying or transporting. So, Annavaha Srotas are the channels that carry and process food inside the body.

Marga (Pathway): Begins from mouth → Pharynx → Esophagus → Stomach → Small intestine (duodenum, jejunum, ileum) → large intestine. (Modern correlation)

Function of Annavaha strotas:

- 1) Ahara Grahana (Ingestion of food)
- 2) Pachana (Digestion of food)
- 3) Absorption and assimilation of nutrients
- 4) Formation of Rasa Dhatu
- 5) Mala Nirmana (Excretion of undigested food)

Srotodushti Hetu (Etiological Factors):

- 1) Aharaja (Dietary): Overeating, irregular eating habits, incompatible food (Asatmyahara), eating before digestion of previous food.
- 2) Viharaja (Lifestyle): Day sleep, lack of exercise, excessive exertion, night awakening.
- 3) Manasika (Psychological): Stress, anger, anxiety, fear.
- 4) Agantuja (External): Infections, contaminated food or water.

Dosa Pradhanata:

- 1) Mainly Vata and Pitta Dosa are dominant in the functioning of Annavaha Srotas.
- 2) Samana Vayu – helps in digestion and movement of food.
- 3) Pachaka Pitta – responsible for digestive fire.

Types of Dushti (Pathological Changes):

- 1) Sanga – obstruction of food passage.

- 2) Atipravrtti – excessive peristalsis (as in diarrhea).
- 3) Sira Granthi – formation of nodules or constrictions
- 4) VimargaGamana– wrong direction movement (as in vomiting).

Samprapti:

Agnimandya (weak digestion) → Ama formation
→ Strotorodha (obstruction of channels) → Dushti of
Annava Srotas → Formation of disease.

SrotodushtiLaksana :

- 1) Arochaka (loss of appetite)
- 2) Ajeerna (indigestion)
- 3) Chhardi (vomiting)
- 4) Adhmana (abdominal distension)
- 5) Atisara (diarrhea)
- 6) GrahaniRoga (chronic malabsorption)
- 7) Mental stress

Clinical correlation with mansik vyadhi (psychiatric illness):

Disturbed digestion and Ama formation produce toxins that affect the central nervous system and disturb neurotransmitter balance, comparable to the modern concept of gut-brain axis.

That means,

- 1) Mandagni + Ama Produces Anxiety,depression,heaviness of mind.
- 2) Vatavridhi (bloating) Produces insomnia.
- 3) Irritaed Sadhak pitta Produces Anger,irritability,emotional instability.
- 4) Rajas andTamas increases psychological imbalance.

2. Rasavaha Srotas:

According to Acharya Charak the Moolstan of Rasavaha srotas is,

रसवहानांस्त्रोतसांहृदयंमूलंशचधमन्यः”। च. वि. ५/७

It can be correlated with Heart and channels that carry and circulate rasadhatu.

According to Acharya Sushrut the Moolstan of Rasavaha srotas is

“रसवहेद्रे, तयोर्मूलंहृदयंसवाहिन्यश्चधमन्यः”। सु.शा ९/१२

It can be correlated with Heart and channels that carry and circulate rasadhatu.

“Rasa” means essence or plasma the first dhatu formed after food digestion,“Vaha” means carrying or

transporting. So, Rasavaha Srotas are the channels that carry and circulate the Rasa Dhatu, which nourishes all tissues (Dhatu) and maintains vitality.

Function of Rasavaha srotas:

- 1) TransportationCirculates Rasa Dhatu (nutritive plasma) throughout the body.Nutrition Provides nourishment to all seven dhatu.
- 2) Maintenance of Homeostasis Balances fluid and nutrient supply to tissues.
- 3) Helps in formation of Raktdhatu.
- 4) Maintenance of immunity and strength.
- 5) Regulation of body temperature.

Srotodushti Hetu (Etiological Factors):

- 1) Aharaja (Dietary): Intake Viruddha Ahara, Guru Ahara (incompatible or heavy food)
 - a. Cause improper digestion.
- 2) Viharaja (Lifestyle): Excessive fasting, dehydration causes weakness in Rasa formation.
- 3) Manasika (Psychological): Stress, fear, grief causes Disturbance in Rasa flow
- 4) Agni Mandya (weak digestion): Formation of Ama (toxins)
- 5) Agantuja (External): Blood loss or chronic illness Depletion of Rasa

Types of Dushti (Pathological Changes):

- 1) Sanga – obstruction of Transportation and Circulation Rasa Dhatu
- 2) Atipravrtti – excessive formation of rasdhatu shows rasvridhilakshan.
- 3) Sira Granthi – formation of nodules or constrictions
- 4) VimargaGamana– wrong direction movement (as in vomiting).

Samprapti:

According to Charaka Hridaya (heart) and Dash Dhamani (ten great vessels) According to Sushruta Hridaya and Dasha Dhamani (same as Charaka) → These ten great vessels originate from the heart and help distribute Rasa Dhatu throughout the body. → The Rasa Dhatu formed after digestion enters these channels. →It circulates through Dhamanis and Siras to supply nutrition to every part of the body. →Any obstruction or rasvahaastroto dushti →causes disease Srotodushti Lakshana

- 1) Ajeerna
- 2) Raktadushti
- 3) Rasakshaya
- 4) Hrudaya Vikara
- 5) Ama dosha
- 6) Mental stress.

Clinical correlation with mansik vyadhi (psychiatric illness):

When Rasa Dhatu becomes Dushta (vitiated), it fails to nourish tissues, including the brain and heart, leading to anxiety, depression, or mood disturbances.

That means,

- 1) Rasavaha Srotas Dushti causes Neurochemical imbalance (serotonin, dopamine).
- 2) Rasa Kshaya causes Anxiety disorders, restlessness, and fatigue.
- 3) Rasa Vriddhi (Kapha dominance) causes Depression, sluggishness.
- 4) Rasavaha Srotodushti with Ama Toxic metabolic states affecting mood (psychosomatic illness)
- 5) Ojas depletion causes Mental exhaustion, burnout, psychosis
- 6) Hrudaya Dushti (heart–mind axis) causes Psychosomatic heart disorders, emotional stress affecting cardiovascular health.

Manovaha Srotas:

“दोषाः प्रकुपिता हृदयमुपसृत्य मनोवहानिस्त्रोतां स्यावृत्य जनयन्त्युन्मादम्” । च.नि ७/४

In Charaka Samhita, Nidana Sthana, Chapter 7 Unmada Nidana the Mana (mind) resides in the Hrudaya (heart). From the heart, all sensations and mental activities such as cognition, memory, and emotions originate and are controlled. When the doshas Vata, Pitta, and Kapha become aggravated and reach the heart, they obstruct the channels of the mind Manovaha Srotas that means and thereby produce Unmada (insanity or mental derangement), Aggravated doshas disturb the heart and block the mind-carrying channels (Manovaha Srotas), leading to various psychiatric disorders or mental imbalance. Therefore, the Hrudaya is considered the Mulasthan. But according to modern science Mana is considered as Mastishk that means Brain.

- Manas depend on proper nutrition (Ahara and Rasa Dhatu).

- Satva, Rajas, and Tamas are the three Manasika Doshas are influenced by the quality of Ahara Rasa.
- Tamasic or Rajasic Ahara (junk, fermented, over-spiced food) leads to Manovikara such as anxiety, irritability, depression.

Patho-physiology (Samprapti) of Psychiatric Disorders

1. Improper Ahara (diet)
2. Agni Mandya (weak digestion)
3. Ama formation
4. Dushti of Annavaha Srotas
5. Vitiating of Rasavaha Srotas
6. Impure Rasa Dhatu (Ahita Rasa)
7. Derangement of Satva, Rajas, Tamas
8. Manifestation of Manasika Vyadhi (Psychiatric illness)

Modern Correlation of Annavaha srotas, Rasavaha srotas and Manovaha srotas:

1. Annavaha srotas with psychiatric illness
Annavaha srotas are responsible for digestion, absorption, and movement of food (Anna). Srotodushti (vitiating) leads to Mandagni (low digestive fire), Ama formation, Vata–Pitta imbalance Gut–mind disturbance Ayurveda states “Rogasarvepimandagnau” – most diseases originate from impaired digestion, including manas (mental) disorders. Modern physiology strongly supports the Gut–Brain Axis, linking digestion with mental health
- A. Gut–Brain Axis Dysfunction: Poor digestion → gut inflammation → altered neurotransmitters. Vagus nerve connects the intestine directly to the brain.
- B. Micro biome Dysfunction: 90% of serotonin (feel-good neurotransmitter) is produced in the intestines. Dysbiosis (altered gut flora) is associated with Anxiety disorders, Depression, OCD, Autism spectrum disorders, Stress-related disorders
- C. Malabsorption & Deficiency States: Impaired Annavaha srotas → deficiencies of Vitamin B12, Iron, Folate, Omega-3 fatty acids. These lead to: Fatigue, irritability, Cognitive impairment, Mood disorders, Depression and anxiety.
- D. Inflammatory Pathways: Chronic Ama → systemic inflammation → elevated cytokines (IL-6, TNF-alpha). Modern link Inflammation plays a major role in depression and bipolar disorders.

Disorders of Annavaha strotas correlate with psychiatric conditions through the gut-brain axis, inflammation, mal absorption, and neurotransmitter imbalance.

2. Rasavaha strotas and Psychiatric Illness

Rasavaha strotas circulate Rasa Dhatu (primary nutrient plasma).

Responsible for Nutrition, Immunity, Mental stability (satva).

Vitiation of Rasavaha strotas leads to Anemia, Weakness, Anxiety, Psychological instability.

Rasa Dhatu correlates with blood plasma, lymph, early nutrients, and endocrine/hormonal communication.

A. Neurotransmitter Circulation

Rasa is responsible for distributing essential substrates,

- Amino acids → serotonin, dopamine precursors
- Glucose → brain energy
- Hormones → cortisol, thyroid hormones
- Insufficient or imbalanced Rasa → neurotransmitter imbalance → psychiatric disorders.

B. Hormonal and Neuroendocrine Dysfunction

- HPA Axis dysregulation (cortisol excess) → anxiety, depression
- Thyroid dysfunction → mood disorders
- Estrogens/progesterone imbalance → PMDD, postpartum depression

C. Circulatory and Metabolic Factors

Poor plasma quality leads to, chronic fatigue, Brain fog, Altered glucose metabolism. Risk

Factors for Depression, Anxiety, Stress disorders

D. Inflammation and Immune Response

Inflammation triggers Major depressive disorder, Schizophrenia, Autoimmune-associated psychiatric symptoms.

Disturbance of Rasavaha strotas results in hormonal, metabolic, immune, and neurotransmitter dysregulation that directly contributes to psychiatric conditions.

Management Principles:

1. Nidana Parivarjana (Avoid Causative Factors):
Avoid Ajeerna, excessive fasting, irregular diet, over thinking, and emotional suppression.

2. Deepana-Pachana: Use of Trikatu, Chitraka, Shunthi, Pippali for improving Agni and clearing Ama.

3. Srotoshodhana (Purification of Channels):
Panchakarma: Vamana, Virechana, Basti therapy to clear Annavaha and Rasavaha Srotas.

4. Rasayana Therapy: Brahmi, Mandukaparni, Ashwagandha, Jatamansi – nourish Rasa Dhatu and stabilize Manas.

5. Medhya Rasayana (Cognitive Enhancers):
Brahmi, Shankhapushpi, Yashtimadhu, Guduchi – enhance mental clarity and emotional balance.

6. Sattvavajaya Chikitsa: Psychological counselling, meditation, Pranayama, and positive behavioral therapy.

III. RESULT

The integrative analysis of Ayurvedic principles and clinical observations shows a strong interconnection between the functional status of Annavaha Srotas and Rasavaha Srotas in contributing to the onset, progression, and severity of psychiatric disorders. The combined results are as follows:

1. Strong Association Between Digestive Impairment and Psychiatric Manifestations

Disturbances in Annavaha Srotas characterized by Agnimandya (poor digestion) and Ama formation were found to be significantly associated with psychological symptoms such as anxiety, irritability, emotional instability, confusion, and disturbed sleep patterns. This suggests that gut dysfunction directly influences mental equilibrium.

2. Rasavaha Srotas Dysfunction Leads to Inadequate Brain Nourishment

Impaired formation and circulation of Rasa Dhatu resulted in fatigue, low mood, diminished motivation, cognitive decline, and poor stress tolerance. This highlights that diminished nutritional status at the tissue level strongly contributes to psychiatric vulnerability.

3. Vata Aggravation Identified as the Central Linking Mechanism

Both srotas disturbances commonly resulted in Vata dosha vitiation. Increased Vata contributed to restlessness, fearfulness, unstable thoughts, and emotional fluctuations. Thus, Vata emerged as the

primary dosha mediating the digestive-psychological connection.

4. Therapeutic Correction of Both Srotas Improved Psychiatric Outcomes

Interventions aimed at improving Agni, reducing Ama, enriching Rasa Dhatu, and balancing Vata resulted in:

- better digestion
- improved mood and emotional stability
- reduced anxiety and irritability
- enhanced cognitive clarity
- improved sleep
- increased overall mental resilience

IV. DISCUSSION

The involvement of Annavaḥa Srotas and Rasavaḥa Srotas in the manifestation of psychiatric disorders highlights the deep interconnection between the gastrointestinal, circulatory, and psychological systems as described in Ayurveda. The discussion integrates classical concepts with modern perspectives to explain how dysfunctions in these srotas influence mental health. Annavaḥa Srotas, responsible for the intake, digestion, and assimilation of food, serve as the foundation for physical and mental nourishment. The primary factors affecting these channels are Agnimandya (digestive fire impairment), Ama (toxicity due to undigested food), improper diet, lifestyle errors, and psychosomatic stress. Disturbed Agni leads to accumulation of Ama, which enters systemic circulation and creates srotorodha (obstruction). When these toxic elements reach the Manavaḥa Srotas, they result in mental foginess, irritability, anxiety, and cognitive disturbances. Modern correlations identify similar pathways through the gut-brain axis, where poor digestion produces inflammatory mediators influencing neurotransmission. Ama and impaired Agni frequently trigger Vata imbalance. Because Vata governs the mind's movement, sensory processing, and psychological stability, its derangement can manifest as anxiety and restlessness, insomnia, mood instability, racing thoughts. Thus, Annavaḥa Srotas dysfunction becomes a major precipitating factor in psychiatric illness. Healthy Rasa Dhatu sustains the mind, emotions, sensory organs, and higher cognitive functions. When compromised due to poor nutrition,

stress, or digestive disturbance, it results in, fatigue, depression, emotional instability, poor concentration, memory deficits. This is consistent with modern findings that nutrient deficiencies, anemia, and low glucose supply severely affect brain function. Rasavaḥa Srotas directly nourish Manavaḥa Srotas. Any deficit in Rasa Dhatu diminishes the stability and clarity of the mind. This directly correlates with conditions like generalized anxiety disorder, chronic stress, and depressive illness.

V. CONCLUSION

The Annavaḥa and Rasavaḥa Srotas are pivotal in maintaining both somatic and psychological equilibrium. Their dysfunction is a root cause of many psychiatric illnesses. Ensuring proper digestion, nourishment, and purity of Rasa Dhatu through Ahara, Vihara and Manonigraha forms the cornerstone of Ayurvedic mental health management. The Ayurvedic view of the gut-brain relationship offers profound insight into psychosomatic balance and can complement modern psychiatric approaches. The functioning of the mind is inseparably linked to the integrity of Annavaḥa and Rasavaḥa Srotas. Disturbances in digestion, nutrient absorption, circulation, and tissue nourishment directly impact psychological well-being. The Ayurvedic perspective, strengthened with modern physiological parallels, emphasizes the significance of gut health and systemic nourishment in preventing and managing psychiatric disorders. Hence, an integrative approach targeting these srotas can contribute significantly to comprehensive mental healthcare.

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