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**Case Study** 

## AYURVEDIC MANAGEMENT OF SCHIZOPHRENIA: A CASE REPORT

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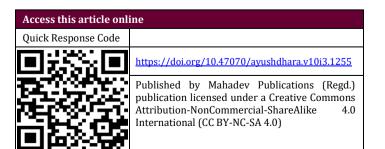
#### **ABSTRACT**

Schizophrenia is unarguably one of the most devastating mental illnesses, that affect how a person thinks, feels and behaves. This leads to symptoms such as hallucinations, delusions, disorganized behavior and impaired cognitive ability. The life time prevalence of schizophrenia is about 0.7% and requires lifelong management like medications, psychotherapy, and adequate social support. Symptoms of Schizophrenia are similar to that of *Unmada* mentioned in Ayurveda classics. Ayurveda has proven promising results in reducing the symptoms and improving the quality of life.

This paper deals with a diagnosed case of schizophrenia which can be correlated with *Vatika Unmada* with *Kapha Anubandha* based on signs and symptoms. A 38-year-old female patient approached in our OPD and took two courses of treatment in 2021 December and 2022 October with complaints of disturbed sleep, hearing voices, night mares, lack of confidence, inability to make decisions, fear and wandering. The treatment was planned based on the signs and symptoms. *Snehapana, Virechana, Vasti* and *Nasya* were done. The symptoms were assessed using Positive and Negative Syndrome Scale (PANSS). After the treatment the patient had considerable relief in the symptoms.

## **INTRODUCTION**

Schizophrenia is a severe and often chronic psychiatric disorder causing considerable personal and social burden from severe and long-term disability. Schizophrenia is characterized by positive (e.g. hallucinations, delusions), negative (e.g. alogia, avolition, anhedonia), and disorganized symptoms (e.g. speech, behavior) [1]. The onset of schizophrenia occurs in late adolescence to early adulthood, with a peak in prevalence around 40 years of age. The incidence of schizophrenia has been reported to be 15.2/1,00,000 persons, with a median male: female rate ratio of 1.4[2]. Schizophrenia is a life-long condition, but treatment can help in managing the symptoms. Pharmacotherapy is mainstay in the management of schizophrenia.



In Ayurveda, Ayu or life is the combination of Sharira, Indriva, Satwa and Atma, Avurveda focuses in maintaining a good health through the integrated relationship between them. The psychiatric ailments in Ayurveda come under the broad term Unmada. Unmada is mainly characterized by Astavibhrama or distortion, which includes Mana (psyche), Budhi (intellect), Samina (consciousness), Smrit (memory), Bakti (likes and dislikes), Seela (manners), Chesta (conduct)[3]. (behavior) and Achara Classical management of Unmada like Sodhana, Vasti and Nasya are found to be effective in alleviating the symptoms of schizophrenia.

#### **Patient Information**

A 38-year-old female patient from Kottayam, belonging to upper middle-class family approached in our IPD December 2021 with complaints of disturbed sleep, hearing voices in the ear, night mares, lack of confidence, inability to make decision, fear and wandering.

On detailed interrogation with the patient and informants it was revealed that the patient was the  $2^{nd}$  child of non- consanguineous parents and was very

pampered child. She was an extrovert, average in her studies but very much interested in singing, dancing etc. After completing her B.Com, she got married. She had some adjustment issues there. Her husband was working far away. She couldn't stay with him because her in-laws had some health issues, so she had to take care of them. However, she managed it with some difficulties. In 2010, she joined for a job in a private bank, she became frustrated due to the workload. She couldn't manage her house hold works along with this and her husband was not caring about her issues. All of these increased her stress and she felt very sad, anxious and fear. Her sleep became disturbed, she shows increased anger, started to hear voices and wandered around the home. Due to these problems they consulted a psychiatrist, started to take medicines. After that she got some relief from these symptoms. Her family didn't take her condition seriously. In 2018, she resigned the job, due the workload and stopped the medicines completely. Gradually her condition become worsened as excessive fear, reduced mingling with others and reduced speech. Later her father became bedridden, she had to take care of him. Two years later, after the death of her father, the condition worsened as excessive fear, sad mood, hearing voices, wandering, reduced sleep, night mares etc.

#### **Clinical Findings**

On physical examination, the patient was moderately built, pulse- 76/minute, heart rate-76/minute, BP-120/80mm of Hg, respiratory rate - 18/minute, weight- 54kg.

On mental status examination of the patient, she was co-operative but guarded also shows wandering. While assessing, rate and quantity of speech was reduced, volume and tone was low. Mood was found to be sad, and patient had blunted affect. On perception 3rd person auditory hallucination was reported (the patient hears the voices of talking about themselves). Stream and form of thought was not goal

oriented and not in continuous manner. Delusion of reference, control and persecution was present. In higher mental functions, patient was found to be conscious, oriented to time, place and person. Abstract thinking was impaired. Insight was found to be Grade 1 and judgement was impaired both personal and social. The patient also had occasional impulsivity. Family history of psychiatric illness was reported in first and second-degree relatives.

## Dashavidha pareeksha

The patient had *Pitta Vata Prakriti* (physical constitution), *Avara Satwabala* (psychic condition), *Sarvarasa Satmya* (homologation), *Avara Aharasakti* (power of intake of food) and *Jaranasakti* (power of digestion of food), *Madhyama Rogibala* and *Pravara Rogabala*. Main *Doshas* involved in disease pathology were *Vata* and *Kapha*. *Astavibrama* was assessed, Vibrama present in all domains except *Samnjanjana*.

### **Diagnostic Assessment**

Based on mental status examination and clinical history, the case was diagnosed as schizophrenia, as per the diagnostic criteria mentioned in Diagnostic and Statistical Manual of Mental diseases [4].

The patient had the symptoms of *Vatika Unmada* like mainly and associated with *Kapha Dosha*. So, in Ayurveda the case was diagnosed as *Vatika unmada* with *Kapha anubandha*.

## Therapeutic Interventions

Considering the *Dosha* predominance internal medications like *Kalyanakam gritham*<sup>[5]</sup> was given at a dose of 10g at bed time. Combination of *Swetha sankupushpi* (*Convolvulus pluricaulis*), *Gokshura* (*Tribulus terrestris* Linn.) and *Sarpagandha* (*Rauwolfia serpentine*) was given 1g twice daily after food and *Somalatha choorna* <sup>[6]</sup> was given 5g at night after food.

### **Treatment Procedures**

Considering the signs and symptoms procedures like *Kashaya dhara, Rookshana, Sodhana, Vasti* and *Nasya* procedures were done as two courses.

| Table 1: Time line of treatment - 1st a | admission (December 2021) |
|---|---------------------------|
|---|---------------------------|

| Date                     | Procedure     | Medicines and duration  |  |  |
|--------------------------|---------------|---|--|--|
| 3/12/2023                | Virechana     | Avipathichoorna <sup>7</sup> – 20g - 1 <sup>st</sup> day              |  |  |
| 4/12/2023 to 10/12/2023  | Kashayadhara  | Panchagandha churna <sup>8</sup> and Amalaka (Emblica                 |  |  |
|                          |               | officinalis) - 7 days   |  |  |
| 11/12/2023               | Rookshana     | Takrapana 1 1/2L with Astachoorna <sup>9</sup> 10g - 1 day            |  |  |
| 12/12/2023- 16/12/2023   | Snehapanam    | Kalyanaka gritha <sup>5</sup> – 5 days (Samyak snigda lakshana)       |  |  |
| 17/12/2023 to 18/12/2023 | Abyanga and   | Dhanwantharam tailam <sup>10</sup> – 2 days                           |  |  |
|                          | Ushmasweda    |   |  |  |
| 19/12/2023               | Virechana     | Avipathichoorna – 20g in morning empty stomach                        |  |  |
| 20/12/2023- 27/12/2023   | Yogavasti     | Erandamooladi <sup>11</sup>   |  |  |
|                          | Kashaya vasti | Kalyanakamgritha – 70ml   |  |  |
|                          | Snehavasti    |   |  |  |
| 28/12/2023-30/12/2023    | Nasya         | <i>Mahatpanchagavyam gritham</i> <sup>12</sup> - 2ml each nostril – 3 |  |  |

days

Table 2: Time line of treatment - 2nd Admission October 2022

| Date                   | Procedure              | Medicines and duration                     |  |
|------------------------|------------------------|--|--|
| 21/10/2023- 27/10/2023 | Snehapanam             | Kalyanakam gritham- 6 days (up to          |  |
|                        |                        | Samyak snigdha lakshana)                   |  |
| 28/10/2023- 29/10/2023 | Abyanga and Ushmasweda | Dhanwantharam tailam - 2 days              |  |
| 30/10/2023             | Virechana              | Avipathichoorna – 25g                      |  |
| 1/11/2023 - 8/11/2023  | Yogavasthi             |  |  |
|                        | Kashayavasthi          | Erandamooladi                              |  |
|                        | Snehavasthi            | Kalyanakamgritham – 70ml                   |  |
| 9/11/2023-11/11/2023   | Nasyam                 | Ksheerabala <sup>14</sup> - 2ml for 3 days |  |

## **Follow Up and Outcome**

The patient was admitted to the Inpatient Department (IPD) for a period of 1month during her first admission. While discharging, oral medication was prescribed and regular follow up once in a month was advised. After 10 months, she was readmitted in the Inpatient Department (IPD). Assessment was done using Positive and Negative Syndrome Scale

Table 3: Assessment on 1st Admission

| BT  | AT |
|-----|----|
| 109 | 68 |

After the first course of treatment, her sleep improved, the patient became calm, wandering reduced, intensity of auditory hallucinations got reduced. Delusion of reference, delusion of persecution persisted.

Table 4: Assessment on 2<sup>nd</sup> Admission

| ВТ |  | AT |  | 1 |
|----|--|----|--|---|
| 59 |  | 42 |  | 1 |

After the second course of treatment, the patient had considerable relief in the symptoms such as she became happy, ready to mingle with others easily, there was no hallucinations and fear. Delusions become ideas and insight was changed to Grade 6.

### DISCUSSION

Unmada is a broad term including various kinds of psychiatric ailments. In Unmada the etiological factors like Avarasatwatha, Manoabhigata, Viruddhahara etc cause Manasika and Sareera dosha dusti which afflicts the Hrdaya (the abode of intellect) and Manovahasrothas which results in Unmada lakshanas[14].

The patient was presented with *Vatika Lakshanas* like *Bhaya* (fear), *Asabdhasravana* (hearing voices), *Parisaranamajasram* (wandering), irritability, *Nidranasam* (disturbed sleep) and *Kaphaja Lakshanas* like *Thooshnibhava* (reduced mingling with others), *Anannabhilasha* (reduced intake of food)etc. Based on the symptoms, the diagnosis was done as *Vatika Unmada* with *Kapha Anubandha. Sweta Sankupushpi, Gokshura* and *Sarpagandha Choorna* were given as part of medication. *Sweta sankupushpi* having anti-stress, anxiolytic and nootropic action [15]. *Gokshuara* having

antidepressant and axiolytic action, the harmine content helps to elevate dopamine in the brain<sup>[16]</sup>. *Sarpagandha* (*Rauwolfia serpentina*) is *Nidrajanaka* and having antidepressant action<sup>[17]</sup>. *Kalyanaka gritha* was given to the patient as the she had psychotic features. In *Kalyanaka ghrita* most of the drugs having antioxidant properties, which helps to improve cognitive functions<sup>[18]</sup>.

Initially *Virechana* was done with *Avipathy choorna* since the patient was irritable. *Kashaya shirodhara* with *Panchagandha* and *Amalaka* was done for 7 days. In *Shirodhara*, prolonged and continuous pouring of liquid on forehead results in nervous stimulation and tranquilizing effect<sup>[19]</sup>. *Shirodhara* normalizes the two important neurotransmitters serotonin and norepinephrine, which regulates a wide variety of neuro-psychological processes along with sleep<sup>[20]</sup>. After *Shirodhara* her sleep was improved and irritability got reduced.

To prepare the patient for Shodhana therapy, Takrapana was administered for 2 days, which is Agnideepana and Rookshana<sup>[21]</sup>. After Takrapana, Snehapana with Kalyanakamgritha was administered till the observance of Samvak Sniadha lakshanas[22]. Snehapana also brings about the *Utkleshana* of vitiated Doshas which makes it to be easily eliminated by Shodhana therapy. During Snehapana the patient was irritable. After that, Abhyanga and Ushna sweda was done for 3 days which was intended to bring about liquefaction of the vitiated *Doshas* followed by Virechana with Avipathy choorna. Virechana was planned as the Sodhana procedure, which when properly administered brings about Indriyaprasada, Buddhi prasada, Srothovisuddhi, Laghuta, Agnivriddhi, Anamayatva and Vathanulomana[23]. After Shodhana the patient becomes calm and relaxed, auditory hallucinations also got reduced.

Yogavasti was done with Erandamooladi Kashayavasti and Snehavasti with Kalyanakam gritha. Vasti is the main treatment for Vata which is considered as the controller of mind. Shodhana therapy can modulate the gut- brain axis. Gut microbiota play a potential role in modulating

psychological stress via the vagus nerve. Gut microbiota stimulates the stress response and the activity of the corticosterone pathway<sup>[24]</sup>. After *Shodhana* procedure the insight of the patient got improved, feels calm, ready to mingle with others and considerable relief in auditory hallucinations.

Finally, *Nasya* was performed with *Maha* panchagavyam Gritha. Nasa is the entrance of Siras [25]. Nasya is medicine that delivered through the nose then it enters in to the brain, and helps to eliminate the morbid Doshas. Mahatpanchagavyam ghrita is Tridosha Samana and its administration through nasal route cross blood-brain barrier easily by its lipophilic nature [26].

During the second course, the patient was calm and there was not much disturbances in thought, perception, sleep. So *Sodhana* procedures were done same as in the first course. For *Nasya Ksheerabala* 101 *Avartana was* selected, which has anxiolytic properties which prevent the release of abrupt electric discharges and improves the physical and mental condition of the patient. It has profound soothing and relaxing effects on mind<sup>[27]</sup>.

At the time of discharge *Kalyanaka gritham* 10g HS, combination of *Aswagandha, Amaya* and *Swetha Sankupushpi* – 5g after food, *Thalam* with *Ksheerabala* and *Panchagandha Choorna* was advised.

#### CONCLUSION

Ayurveda has given due importance to the wellbeing of mind or mental faculties along with the physical components of health. Psychiatric ailments in Ayurveda are discussed under the branch of *Bhutavidya* and *Unmada*. Schizophrenia is a serious mental condition characterized by disturbances in thought, feelings and perception. Significant improvements were noted in this case in the domains of hallucinations, sleep, wandering, delusions.

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