

Case Study

Ayurvedic Management of Traumatic Anosmia- A Case Study

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A B S T R A C T

Anosmia is the inability to perceive smell. Anosmia can be temporary or permanent, acquired or congenital. Any disturbances in the pathway of perception of smell, whether mechanical or along the olfactory neural pathway, can lead to anosmia. Usually, it is seen in obstructive and inflammatory conditions of the nose, head trauma, aging, and neurodegenerative diseases. The management of anosmia depends on the underlying pathology.

Based on signs and symptoms Anosmia in Ayurveda can be correlated to *Gandhanasha*.

A male patient with an inability to perceive smell after a road traffic accident came to the OPD and was treated with Ayurveda therapeutics like *Pradhamana Nasya* and *Viddha Karma*. The patient observed considerable relief of the symptoms after the course of treatment.

This case report illustrates the significance of Ayurveda in the management of anosmia.

Keywords: Anosmia, Gandhanasha, Nasya, Pradhamana, Viddha Karma

Introduction

Anosmia is the inability to perceive smell. It can be temporary or permanent and acquired or congenital. Any, disturbances in the nasal pathway that leads to the perception of smell, whether mechanical or along the olfactory neural pathway, can lead to anosmia.¹

Various causes for anosmia are mentioned in Table No. 1

Materials and Methods

Case Study

- **Presenting Complaints:** The Patient came to OPD with a complaint of inability to perceive smell for past 3 months after a road traffic accident (RTA).
- **History:** A 31-year -old male patient came to OPD on 10th June 2022 the complaint of inability to perceive

smell after RTA on 18th March 2022 with no loss of consciousness or orientation. A CT Brain was done on 18th March 2022(Fig. no 4-5) which was suggestive of subdural hematoma. The second CT scan, which was done on 23rd March 2022(Fig. no. 6) had an absence of Subdural hematoma. Later, he observed an inability to smell food, strong perfumes, or any other odors. So, he came to our hospital for management.

Examinations

- External and internal nose showed no significant changes.
- Cold spatula test showed equal fogging.
- Odor Identification Test²- illustrated in Table no. 2.

Treatments: Single sitting of all Treatments were done on OPD Basis.

Table 1.Causes of Anosmia

| Infective Conditions | Obstructions of nasal passage | Damage to brain or nerves: |
|--|-------------------------------|---|
| Acute sinusitis (nasal and sinus infection) | Deviated septum | Aging |
| Chronic sinusitis | Nasal polyps | Alzheimer's disease, Paget's disease of bone, Parkinson's disease, Schizophrenia, |
| Common cold | Tumors | Brain aneurysm, Brain surgery, Brain tumor |
| Coronavirus disease 2019 (COVID -19) | - | Kallmann's syndrome, Klinefelter syndrome, Sjogren's syndrome. |
| Hay fever (allergic rhinitis) | - | Multiple sclerosis, |
| Influenza (flu) | - | Radiation therapy, Rhinoplasty |
| Nonallergic rhinitis (chronic congestion or sneezing not related to allergies) | - | Diabetes |
| Smoking | - | Zinc-containing nasal sprays (taken off the market in 2009), Zinc deficiency |

Table 2.Result of Smell Recognition Test

| Common Smell | Before Treatment | After Treatment |
|--------------------|------------------|---|
| Soap (Green Apple) | No sensation | Fruity smell perceived |
| Sanitizer | No sensation | Perceived and differentiation can be made. Fruity smell perceived |
| Savlon | No sensation | Perceived and differentiation can be made |
| Spirit | Mild Perception. | Perceived and differentiation can be made. |
| Pepper | No sensation | Smell perceived but no differentiation |
| Coffee | No sensation | Smell perceived but no differentiation |
| Vicks | No sensation | Smell perceived but no differentiation |

Table 3. Treatments Given

| Treatment | Dosage | Duration |
|---|--|--|
| Nasya with Pippali Ksheerapaka | 8-8 drops Once/day (empty stomach) | 4 days (11 th June- 14 th June 2022) |
| Viddhakarma ³ over tip of nose and lateral sides of Nose | -- | 5 days (15 th June- 19 th June 2022) |
| Viddhakarma + Pradhamana Nasya with Chhinknichurna | 3 muchyuti Once/day (empty stomach) | 6 days (20 th June- 25 th June 2022) |
| Pratimarsha Nasya with Ghrita | 2-2 drops Once/day (early morning, empty stomach) | 3 days (26 th June- 28 th June 2022) |
| Viddhakarma + Pradhamana Nasya with Chhinkni churna | 3 muchyuti | 6 days (29 th June- 4 th July 2022) |

Procedure

- **Viddha Karma³:** *Viddha Karma* is the procedure for removal of *Vata Dosha* in *Sira's*, which is done by puncturing the *Sira* with a hollow needle and allowing the removal of *Vayu*. Sites selected for *Viddha Karma* were *Nasaagre* (tip of nose) and *Nasa Sameepe* (sides of nose), as illustrated in Fig. no. 3.
- 1. **Purva Karma:** 26 and ½ gauge sterile needle was taken. The site of *Viddha Karma* was cleaned with spirit and cotton.
- 2. **Pradhana Karma:** Once the spirit dried, with the help of a sterile needle, a puncture was done over selected site.
- 3. **Paschat Karma:** Site of *Viddha* was cleaned with the help of sterile cotton.
- **Pradhamana Nasya:** *Pradhamana* is a type of *Nasya* where *Sushma churna* of *dravyas* is used for nasal inhalation.
- 1. **Purva Karma:** *Sukshma Churna* for *Pradhamana* was kept ready. A small cylindrical pipe with open ends was made out of paper.
- 2. **Pradhana Karma:** Early morning around 8 AM, Patient with empty stomach was asked to sit comfortably. The required amount of *Chhinkni Churna* was blown into both nostrils with the help of rolled paper.
- 3. **Paschat Karma:** Patient was instructed to avoid cold, wind, exposure to sun, and dust.
- **Route of administration:** Nasal administration.

Result

The result was compared using the Smell Recognition Test, where different, easily recognizable substances with strong volatility were used.

As observed, the patient was unable to smell any substance before treatment except for spirit, which was perceived as something irritating in front of the nose.

After the treatment patient was able to perceive smell and differentiate strong odor substances.

He was able to perceive smell but not differentiate between substances with mild odor.

As per the patient same progress of perceiving and differentiating strong odor's is maintained till now without further intervention. (Last update- 13/1/2025)

Discussion on Disease

1. The acquired anosmia develops later in life due to various causes, such as upper respiratory infections, neurodegenerative diseases, or head trauma as seen in this specific case.
2. *Gandhanasha* is not mentioned as a separate disease, it is mentioned as a symptom of *Marmaghata* of *Phana Marma*.
3. *Samprapti* of disorder can be understood as:

Discussion on Treatments

Anosmia is not only a disease of *Nasa* but also affects *Indriyas* and *Shiras*. Thus, in this case, *Nasya* which is considered as the prime treatment modality in *Urdwajatra Rogas* (*Nasa Hi Shiraso Dwaram*) was chosen.

Further, as there is involvement of *Vata Dosha*, *Viddha Karma* was done to remove *Vata Avarana* to facilitate the effects of *Nasya*.

- **Nasya with Pippali KsheeraPaka** was done for 4 days as a part of *Shodhana*. *Pippali Ksheerapaka* which possesses *Ushna* and *Teekshna Gunas*, removes the *Kapha Avarodha* in *Indriyas* and *Srotas*.
- **Viddha Karma**-It was done alone for 5 days, which might help in the removal of *Vata Avarana* which further helps in the removal of obstruction in blood vessels and the establishment of circulation, which might be hampered due to Trauma.⁵ Later *Viddha karma*, along with *Nasya* helps in removal of excess *Vata* thus, facilitating its effects.

- **Pradhamana Nasya with Chhinkni Churna:** Ingredients of *Chhinkni Churna* consists of menthol, camphor, cardamom, sandalwood and eucalyptus which are indicated in nasal congestion and are of a strong odorin nature. Thus, this combination was used for *Churna Nasya*, which could have helped in triggering the olfactory sensation. Due to continuous use and *Tikshna, Ruksha Guna* of *Pradhamana Nasya*, *Vata vrudhi* could have happened that led to reddish discoloration, congestion, and dryness of nasal mucosa. Thus, *Pradhamana Nasya* and *Viddha Karma* were stopped for 3 days.
- **Pratimarsha Nasya with Ghrita- Pratimarsha Nasya** was done with *Ghrita*, which has *Vatahara* and *Soumya Guna*, which helped in the control of vitiated *Vata* and after the *Vata Vriddhi Lakshanas* subsided *Pradhamana Nasya* and *Viddha Karma* were continued for the next 6 days.



Figure 1.Viddha Karma



Figure 2.Pradhamana Nasya

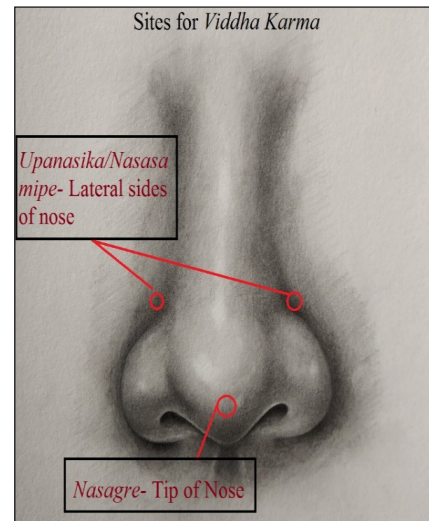


Figure 3.Sites for Viddha Karma

| ST. JOHN'S MEDICAL COLLEGE HOSPITAL Bangalore 560034, Tel +9180 22085000 DEPARTMENT OF RADIOLOGY | | | |
|---|---------------------|--------------------|---------------------|
| Patient ID | 4673583 | Patient Name | KUMAR GOYAL KRISHAN |
| Gender | Male | Age | 31Y |
| Study Date Time | 18-03-2022 15:25:59 | Study Type | CT |
| Referring Physician | EMED | Reported Date Time | 18-03-2022 16:16:26 |
| CT BRAIN PLAIN | | | |
| Clinical History Provided: a/h/o RTA sustained injury to the head. | | | |
| Findings: | | | |
| Bilateral basifrontal hemorrhagic contusions with perifocal edema noted. SDH noted along the anterior falx (measuring ~ 3mm). Scalp swelling noted overlying the occipital bone. Basal cisterns and cerebellum are normal. Ventricular system, cisternal spaces and cortical sulcal spaces are normal. There is no midline shift. Sellar and parasellar regions are normal. Bony calvarium is normal. Visualized orbits and temporal bones appear normal. | | | |
| CT CERVICAL SPINE | | | |
| Findings: | | | |
| Alignment : Normal. Vertebral bodies : • Height : Normal. Spinal canal : Normal. Facetal joints : Normal. Cranio vertebral junction : Normal. Pre- and para vertebral soft tissues : Normal. | | | |
| Impression | | | |
| • Bilateral basifrontal hemorrhagic contusions with perifocal edema. | | | |
| Page 1 of 2 | | | |

| ST. JOHN'S MEDICAL COLLEGE HOSPITAL Bangalore 560034, Tel +9180 22085000 DEPARTMENT OF RADIOLOGY | | | |
|--|---------------------|------------------------------------|---------------------|
| Patient ID | 4673583 | Patient Name | KUMAR GOYAL KRISHAN |
| Gender | Male | Age | 31Y |
| Study Date Time | 18-03-2022 15:25:59 | Study Type | CT |
| Referring Physician | EMED | Reported Date Time | 18-03-2022 16:16:26 |
| Findings: | | | |
| • Thin SDH along the anterior falx. • Scalp swelling overlying the occipital bone - s/o hematoma. | | | |
| Dr. Joe John Joseph PG Resident | | Dr. Sarfraz H Adnan Radiologist | |
| *** This Report has been Electronically Signed *** -- End of Report -- Page 2 of 2 | | | |

Figure 4-5.(CT Scan 18/03/2022)

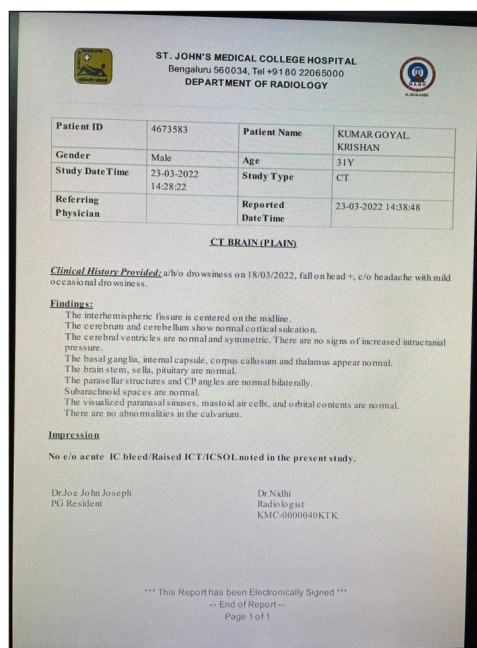


Figure 6. CT Scan 23/03/2022

Conclusion

- In this case study, the sense of olfaction was lost due to head trauma, which is one of the major causes of Anosmia.
- Here, *Teekshana Pradhamana Nasya* and *Viddha Karma* were used, which can both be easily administered on an OPD basis.
- As this case was of recent traumatic origin, treatments for *Samprapti Vighatana* gave better results with no relapse of symptoms.
- For anosmia of other origins that have a tendency to reoccur, *Rasayana Chikitsa* after *Samprapti Vighatana* can be used for long lasting results.
- Further, as there is no established treatment protocol for management of anosmia, this study provides a scope for further research of ayurvedic treatments in anosmia.

Conflict of Interest: None

Source of Funding: None

References

1. <https://www.mayoclinic.org/symptoms/loss-of-smell/basics/causes/sym-20050804> accessed on 06-06-2024.
2. Wrobel BB, Leopold DA. Clinical assessment of patients with smell and taste disorders. *Otolaryngologic Clinics of North America*. 2005 Mar 1;37(6):1127.
3. Gogate RB. *Viddha and Agnikarma Chikitsa*, 5th ed. Pune: Vaidyamitra Publications; May 2022. p.32
4. Acharya JT, editor. *Susruta Samhita of Susruta with the Nibandhasangraha commentary of Sri Dalhanacharya*, Shareerastana; Siravyadhaividhi Adhyaya:

Chapter 8, Verse 17. Varanasi: Chaukhambha Orientalia; 2015.p.381.

4. Pradhan N, Pandagale S. Role of Viddhakarma in management of Gandhanasha wsr to Hyposmia-A Clinical Study. *Journal of Ayurveda and Integrated Medical Sciences*. 2022 Mar 20;7(1):397-400.