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Case Study

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CASE STUDY ON KARNA SRAVA (EAR DISCHARGE) TREATED WITH VARUNADI TAILA AND RASNADI GUGGULU

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ABSTRACT

Background: Karna Srava (ear discharge) is a condition often associated with chronic ear infections, typically resulting from an imbalance in Vata and Kapha doshas in Ayurveda. It can lead to discomfort, pain, and inflammation. Modern treatment options, including antibiotics, may fail to provide long-term relief. Ayurvedic remedies, such as Varunadi Taila and Rasnadi Guggulu, offer alternative treatment approaches rooted in balancing doshas and promoting natural healing. Case Presentation: A 32-year-old female office worker presented with chronic ear discharge (Karna Srava) from the right ear, persisting for two months. The discharge was watery, accompanied by mild pain, itching, and erythema in the external auditory canal. The patient had previously undergone a course of antibiotic ear drops without improvement. She had a history of recurrent upper respiratory infections, a sedentary lifestyle, and frequent exposure to cold. Ayurvedic Diagnosis: The patient was

diagnosed with Karna Srava due to a Vata-Kapha dosha imbalance. Modern diagnosis suggested chronic otitis media with serous discharge. **Treatment:** The treatment plan involved the application of Varunadi Taila (medicated oil) via Karna Pichu (ear swab), twice daily for 14 days, and oral administration of Rasnadi Guggulu (2 tablets twice daily). The treatment also included dietary modifications, avoiding Kapha-aggravating foods, and lifestyle adjustments such as Nasya therapy and ear protection. **Results:** By day 7, there was a significant reduction in ear discharge, pain, and itching. By day 14, symptoms had completely resolved, and the ear canal was clear of inflammation. A follow-up at 30 days

showed no recurrence of symptoms. **Conclusion:** The combination of Varunadi Taila for local application and Rasnadi Guggulu for oral administration effectively managed Karna Srava. This treatment approach reduced inflammation, stopped ear discharge, and restored normal ear function, demonstrating the potential of Ayurvedic therapy for chronic ear conditions.

KEYWORDS: Karna Srava, Ear Discharge, Varunadi Taila, Rasnadi Guggulu, Ayurvedic Treatment for Karna Srava.

INTRODUCTION

The literature on Urdhvajatrugata (ENT) Roga is extensive. It is also true that all of the ancient treatises contain a comprehensive description of Karanrogas.^[1] In karnasrava, pus discharge from an ear affected by Vata might be caused by an abscess that has suppurated, by head trauma, or by submersion in water.^[2] Because of the tympanic membrane perforation observed in active mucosal COM, this condition can be linked to chronic suppurative otitis media. It is also comparable to Yapya/Krichchha Sadhya, Taka-Mamsa Gata, and Pitta-Kaphaja Dushta Varana. A perforation is deemed permanent if it lasts longer than 12 weeks and results in CSOM.^[3]

• Nirukthi of Karnasrava

"Karnasrava" word is made up of two words.

- 1. *Karna* which means the ear.
- 2. *Srava* which means flow, flowing, oozing, dropping, exudate or discharge. So *Karnasrava* literary means any type of oozing, discharge or exudates from ear.

Nidana Pancaka of Karnasrava

- 1. *Nidana* (Causes)
- 2. Purvarupa (Premonitory symptoms, prodromal)
- 3. Rupa (Signs and symptoms, clinical features).
- 4. Upashaya (Diagnostic tests).
- 5. Samprapti (Process of manifestation pathogenesis).

• NIDANA-Charaka Samhita

Acharya Charaka has not mentioned any kind of Nidana regarding Karnaroga but he has described Karna shoola, Badirya under Vataja vyadias and uttpatti of Karnaroga from Shiroroga in Kiyantahshirasiyam adhyaya.^[4]

Sushruta Samhita

According to Sushruta^[5] the Nidaana of Karnasrava are

- 1. Shiroabhigatha (Head injury)
- 2. Jala Krida (Immersionin water)

Yogaratnakara^[6]

Common causes of Karanrogas are

- 1. Avasyava
- 2. Jalakrida
- 3. Karnakandu
- 4. Mithya Yoga Shastrasya

Ashtanga Sangraha and Ashtanga Hridaya^[7] Acharya Vagbhata has considered common Nidaana of Karnaroga as Nidaana of Karnasrava.

- 1. Pratishyaya
- 2. Jalakrida
- 3. Karnakandu
- 4. Mithyayogen Shabdasya (sound pollution)

• Purvarupa

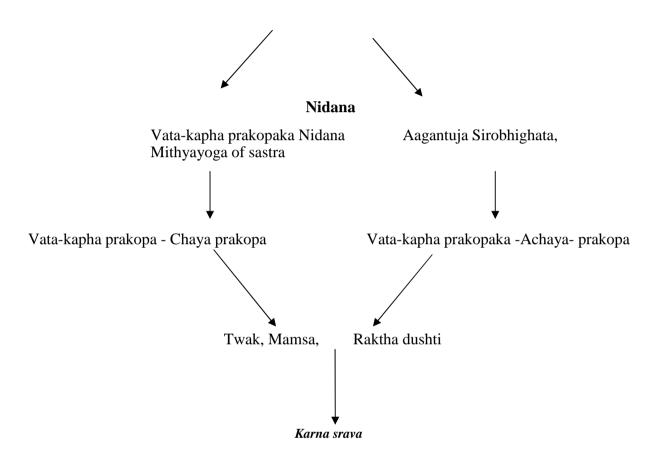
Acharya Madhavakara describes Purvarupa as expression of Rupa (Lakshanas) with less intensity i.e. less intensity of sound in the ear, may be considered as the Purvarupa of Lakshanas, therefore no specific purvroopa are found for Karnasrava in the classical literature.

• $Rupa^{[8]}$

Karnasrava itself is the *Rupa* for this disease. The various characteristics of *Srava* according to involvement of *Dosha* are mentioned by *Acharya Charak* in following table.

Vatika Karnasrava	Kaphaja Karnasrava
Tanusrava (thin discharge)	Shukla-Snigdha Sruti (White and sticky)
Ashravana (Inability to hear	Sthirata (stiffness)
Karnanaada (Tinnitus)	Alpa Ruka (Dull pain)
Atiruka (Excessive pain)	Visrutha (Defective hearing)
Karnamalasya Shosha (Drying of earwax)	Kandu (Itching)

Samprapti: Pathogenesis



Samprapti Ghatakas

Dosha - Vata

Dushya - Karnagata Siras, RasaShrotas – Shabdavaha.

Shroto dushti - Vimargagamana of Vata.

Adhishthana – Karna.

Rogamarga – Madhyama.

Sanchara Sthana - Sarva Sharira (Vatavaha Nadi)Vyakta Sthana - Karna

Udhbhavasthana - Koshtha Prabheda - Vatika, kaphaja. Lakshanas - Discharge of pus etc.

Table 1: Oral Ayurvedic drugs described in the management of Karnasrava.

Name	Contents	
Rasnadi Guggulu	Rasna, Amrita, Eranda, Devdaru, Saunth, Guggulu	
	Sariva, Madhuka, Kushtha, Chaturjata, Priyangu, Nilotpala, Guduchi,	
Sarivadi vati	Lavanga, Triphala, Lauha Bhasma, Abhraka Bhasma, and Swaras of	
	Bhringraj, Kakmachi, Gunja, Decoction of Arjun ^[9-10]	

Table 2: Various drug formulations described for Karnapoorana.

Name of drug/ formulation	Form of formulation	Main contents	
Madhukadi tail	Oil	Madhuka, Dashmoola, Daruharidra, Kadali, Kushtha, Shigru, Vacha, Devadaru, Saunf, Rasanjana, Saindhava, Vida Lavana, Sarjikshara, Tila tail	
Gandhaka tail	Oil	Haridra, Gandhaka, Sarshpa Tail, Dhatura Swarsa	
Amaradi swarasa	Juice	Amara, Kapitha, Madhook, Sal, Dhav	
Pringavadi tail	Oil	Priyangu, Madhuka, Patha, Dhataki, Manhashila, Shalpar Manjishtha, Lodhra, Laksha, Kapitha, Tila tail	
Kushthadya tail	Oil	Kushtha, Hingu, Vacha, Devadaru, Saunf, Sunthi, Saindhava, Tila tail and Goat's urine	
Hartal + Gomutra	Liquid	Hartal mixed with Cow's Urine	
Rasnajana + Stanya	liquid	Rasnajana with Human Milk	
Lakshadi churna	Churna	Laksha, Rasanjana, Sarja	
Panchkashaya	Decoction	Tinduka, Abhya, Lodhra, Samnga, Amalaki	
Putpakva Gondaka swarsa sidha tail	Oil	Chhatarak, Saindhava Lavana, Tila tail ^[9,11-13]	

Table 3: Ayurvedic herbs with their antimicrobial properties.

Name of Drug	Parts used	Antimicrobial activity	Study design	Researchers
Tulsi	Essential oil	Staphylococcus aureus (including MRSA), Escherichia coli, Pseudomonas aeruginosa	In vitro	Yamani HA et al ^[14]
Haridra	oil	Staphylococcus aureus, E. coli, Pseudomonas aeruginosa	pour plate method	Negi PS et al ^[15]
Lahsuna	Essential oil	S. aureus, E. coli, P. aeruginosa	disc diffusion method	Casella S et al ^[16]
Guduchi	ethanolic stem extracts	Proteus vulgaris, Escherichia coli, Staphylococcus aureus	disc diffusion method	Jeyachandran R <i>et</i> $al^{[17]}$
Babul	Methanol extract	E.coli, S.aureus, K.pneumoniae	Agar gel diffusion	Tambekar <i>et al</i> ^[18]
Mustaka	Acetone extract	Proteus vulgaris	Agar gel diffusion	Tambekar et al ¹⁸
Ashwagandha	Flavanoids extract	C. albicans, S. aureus, P. mirabilis, E. coli, P. aeruginosa	disc diffusion assay	Singh G et al ^[19]
Tumburu	Essential oil	Staphylococcus aureus, Escherichia coli	Broth Dilution Technique	Guleria S et al ^[20]

Nishotha and Sarala	resin rich methanolic extracts	S. aureus, E. coli, P. aeruginosa	Agar gel diffusion	Shuaib M et al ^[21]
Bilwa	Dried fruit extract	P. aeruginosa, E. coli, S. epidermidis, S.aureus	disc diffusion method	Supria D et al ^[22]
Gokshura	Ethanol extract of fruit	S. aureus, E. coli, P. vulgaris, C. albicans	broth microdilution method	Al-Bayati FA et Al ^[23]
Shatpushpa	Crude extract	S. aureus, E. coli, P. aeruginosa, P. vulgaris	disc diffusion method	Al Akeel R et al ^[24]
Aragvadha	Fruit pulp extract	S. aureus, E. coli, P. aeruginosa, C. albicans	disc diffusion method	Bhalodia NR et Al ^[25]

Patient Information

• Name: Mrs. XYZ

• Age: 32 years

• Gender: Female

• Occupation: Office Worker

• **Chief Complaint**: Persistent ear discharge from the right ear for the past 2 months, along with occasional mild pain and itching.

• **Duration**: 2 months

Onset: Gradual

Medical History

- Previous Treatments
- o Antibiotic ear drops (7 days course, no improvement)
- History of recurrent upper respiratory tract infections
- Family History: No significant family history of ear or ENT-related disorders.
- Lifestyle Factors
- Sedentary lifestyle
- o History of cold exposure during travel, leading to episodes of cough and cold.

Clinical Examination

- Vital Signs: Normal
- ENT Examination
- o Right Ear
- Continuous watery discharge
- Mild erythema in the external auditory canal

- Slight tenderness on palpation
- No significant hearing loss
- Left Ear: Normal
- General Condition: Mild fatigue due to the discomfort from ear discharge.

Diagnosis

- Ayurvedic Diagnosis
- o Karna Srava due to Vata-Kapha dosha imbalance leading to chronic ear discharge.
- Modern Diagnosis
- o Likely Chronic Otitis Media with serous discharge.

Treatment Plan

1. Local Application

- Varunadi Taila Karna Pichu
- The patient was advised to undergo daily application of Varunadi Taila in the right ear. A sterile cotton swab (pichu) soaked in the oil was placed in the ear for 30 minutes, twice a day, for 14 days.

2. Oral Medication

o **Rasnadi Guggulu** (2 tablets, twice a day) with lukewarm water after meals for 14 days.

3. Dietary Recommendations

- Avoid Kapha-aggravating foods such as dairy products, cold foods, and fried items.
- o Incorporate light, easy-to-digest foods like warm soups, vegetables, and cooked grains.
- o Drink warm water throughout the day to reduce Kapha and encourage healing.

4. Lifestyle Modifications

- Avoid exposure to cold air, dust, and water, especially when bathing or washing hair.
- Protect ears by using cotton while bathing.
- Regular practice of Nasya karma (nasal oil application) with Anu Taila to prevent respiratory tract infections.

Progress and Follow-up

1. Day 7

- Symptoms: Decreased ear discharge, significant reduction in pain and itching.
- Examination: Mild residual inflammation in the external ear canal, but no discharge.

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2. Day 14

- **Symptoms**: Ear discharge completely stopped; no pain or discomfort.
- **Examination**: Clear ear canal with no signs of infection or inflammation.
- The patient reported feeling overall better, with no recurrence of cold symptoms.

3. Day 30 (Follow-up)

No recurrence of symptoms. The patient was advised to continue dietary modifications and avoid exposure to cold or dusty environments.

OBSERVATIONS AND RESULTS

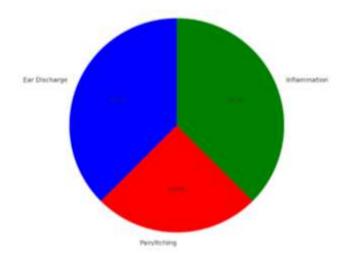
1. Timeline of Treatment and Symptom Relief

A **timeline chart** showing the progression of the patient's symptoms and recovery.

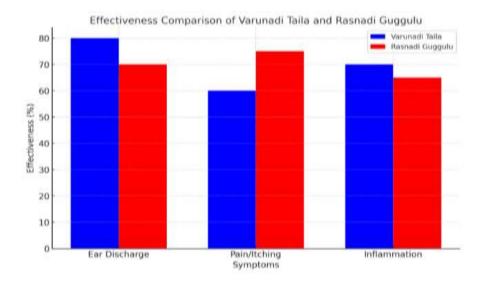
Table A: Symptom Progression Over Time.

Day	Ear Discharge	Pain/Itching	Inflammation
0	Severe	Moderate	Severe
7	Mild	Mild	Mild
14	None	None	None
30	None	None	None

A) Here is the **pie chart** that shows the contribution of each symptom to the overall discomfort before treatment. Ear discharge and inflammation were the most prominent issues, each contributing 37.5%, with pain/itching accounting for 25%.



B) Here is the bar chart comparing the effectiveness of Varunadi Taila and Rasnadi Guggulu in treating different symptoms of Karna Srava. As the chart shows, both treatments are effective, with Varunadi Taila having a stronger impact on ear discharge and inflammation, while Rasnadi Guggulu excels slightly in relieving pain and itching.



DISCUSSSION

• Varunadi Taila in Ayurvedic Perspective

Varunadi Taila is an Ayurvedic herbal oil formulation, primarily designed to balance Vata and Kapha doshas. It is traditionally used for various conditions involving Shotha (inflammation), Shoola (pain), and Dushta Vrana (chronic wounds/infections). The oil is named after its key ingredient, Varuna (Crataeva nurvala), which is known for its anti-inflammatory and antimicrobial properties in classical Ayurveda.

Pharmacodynamics in Ayurveda

1. Dosha Balancing Action

- Vata: Varunadi Taila has Vatahara (Vata-pacifying) properties due to its oil base (Tila Taila) and the Vata-suppressing actions of herbs like Varuna and Bilva. Excess Vata is often responsible for pain, dryness, and inflammation, and this oil works by nourishing tissues and relieving these symptoms.
- Kapha: It also helps in balancing Kapha dosha, which is associated with congestion, excess mucus, infections, and blockages. Herbs like Brihati and Gambhari in the formulation reduce Kapha's heaviness and accumulation of fluids in the body, especially in ENT conditions.

2. Shothahara (Anti-inflammatory)

The oil is extensively used for its ability to reduce **Shotha** (inflammation), especially in ear disorders like **Karna Srava** and other **Karna rogas**. It is also effective in managing inflammatory conditions of joints and sinuses.

3. Vranaropana (Wound-Healing)

The formulation has **Vrana ropana** (wound healing) and **Krimighna** (antimicrobial) actions, making it effective in treating **Dushta Vrana** (chronic wounds or infected lesions) in ear, skin, and other tissues.

4. Shoolahara (Analgesic)

The Shoolahara (pain-relieving) properties help alleviate pain in conditions like Karna Shoola (ear pain), Sandhi Shoola (joint pain), and other inflammatory pains due to Vata vitiation.

4 Key Ayurvedic Ingredients and Their Functions

Ayurvedic Drug Review: Varunadi Taila & Rasnadi Guggulu Vati.

1. Varunadi Taila

Composition

Murchita Taila (processed oil)

Varuna Patra (Crataeva nurvala)

Arka Patra (Calotropis procera)

Kapitta Patra (Limonia acidissima)

Amra Patra (Mangifera indica)

Jambu Patra (Syzygium cumini)

Ayurvedic Perspective: Varunadi Taila is a classical Ayurvedic formulation aimed at balancing Tridoshas, with a special emphasis on pacifying Vata and Kapha doshas. Each of its ingredients provides specific benefits according to the doshic imbalances.

Varuna Patra (Crataeva nurvala): It is known for its Mutrala (diuretic) properties, especially effective in managing Mutravaha srotas (urinary channels) disorders such as kidney stones and urinary retention. It helps in breaking down and expelling kidney stones and cleanses the urinary system.

Kousar et al.

Arka Patra (Calotropis procera): Possesses Vata-Kapha shamaka (Vata and Kapha pacifying) properties. It helps in reducing pain and swelling, making it effective for conditions like arthritis and muscle aches.

Kapitta Patra (Limonia acidissima): Known for its digestive and astringent properties, it assists in pacifying Kapha and improving Agni (digestive fire). It helps in managing bloating and indigestion.

Amra Patra (Mangifera indica): With its cooling properties, it helps in reducing Pitta disorders, such as skin diseases, and possesses anti-inflammatory benefits.

Jambu Patra (Syzygium cumini): Known for its Kashaya rasa (astringent taste) and antidiabetic properties, it helps in managing Madhumeha (diabetes) and various skin disorders due to its ability to pacify Kapha and Pitta doshas.

Therapeutic Uses

Vata-Kapha Disorders: Varunadi Taila is especially beneficial for conditions caused by the vitiation of Vata and Kapha doshas, including joint disorders, skin conditions, and urinary tract diseases.

Srotoshodhana (channel cleansing): It aids in cleansing the Mutravaha srotas (urinary channels), assisting in the treatment of Mutrakrichha (dysuria) and Ashmari (urinary stones). Vataja disorders: The oil's Vata pacifying action makes it useful in alleviating joint stiffness, muscular pain, and general weakness.

Application

External Use: Primarily used in Abhyanga (therapeutic massage) to relieve joint and muscular pain, promote skin health, and soothe Vata-related disorders.

2. Rasnadi Guggulu Vati

Composition

Rasna Patra (Pluchea lanceolata)

Guduchi Twak (Tinospora cordifolia)

Eranda Moola (Ricinus communis)

Devadaru Twak (Cedrus deodara)

Shunti Khand (Zingiber officinale)

Shodhita Guggulu (Purified Commiphora mukul)

Ayurvedic Perspective: Rasnadi Guggulu is a powerful formulation primarily indicated in the management of Vata-Kapha disorders, especially in the Asthi-Sandhi gata roga (bone and joint diseases) and Shotha (inflammation). It works by balancing Vata and Kapha doshas and is particularly effective in Ama pachana (detoxification of toxins) and Srotoshodhana (cleansing of channels).

Rasna (**Pluchea lanceolata**): Well-known for its Vatahara (Vata-pacifying) properties, Rasna is the chief herb used in managing joint pain, stiffness, and inflammation in conditions like arthritis and gout.

Guduchi (Tinospora cordifolia): Acts as a Rasayana (rejuvenator) and enhances immunity. It is also effective in detoxifying Ama, which is the root cause of many Vata and Kapha disorders.

Eranda (Ricinus communis): This herb is known for its Vatahara and Shulahara (pain-relieving) properties. It is widely used in the management of rheumatic conditions and disorders of the bones and joints.

Devadaru (**Cedrus deodara**): A potent Kapha-Vata hara, it helps in reducing Shotha (swelling) and promoting joint mobility.

Shunti (**Zingiber officinale**): Deepana (stimulates digestion) and Pachana (digests toxins), helping to reduce Ama and inflammation in the body. It also improves digestion and metabolism, which is critical in managing chronic joint conditions.

Shodhita Guggulu (Purified Commiphora mukul): Guggulu is known for its Lekhana (scraping) action, helping to remove Ama and excess fat, thus aiding in detoxification and reducing inflammation.

Therapeutic Uses

Vata-Kapha Disorders: Especially useful in the treatment of Sandhigata Vata (osteoarthritis), Amavata (rheumatoid arthritis), and other Vata-Kapha-related joint and muscular conditions.

Shotha (**Inflammation**): Acts as an anti-inflammatory and pain-relieving agent, reducing swelling in the joints and muscles.

Ama Pachana (Digestion of toxins): Helps in detoxifying the body by digesting accumulated Ama, which is often the root cause of inflammatory diseases.

Rasayana (**Rejuvenative**): Guduchi and Guggulu offer rejuvenating properties that promote longevity and strengthen immunity.

Mode of Administration

Typically taken orally in vati (tablet) form, Rasnadi Guggulu is prescribed with warm water or herbal decoctions to enhance absorption and pacify Vata dosha.

Safety and Precautions

While generally safe when used under proper supervision, Rasnadi Guggulu should be avoided by individuals with hyperacidity or severe gastrointestinal issues. Pregnant women and lactating mothers should consult an Ayurvedic practitioner before usage.

Karnasrava refers to otorrhea or ear discharge, which is a condition caused by an imbalance in Vata and Kapha doshas affecting the Karna srotas (ear channels). In Ayurvedic texts, this condition is often associated with ear infections, inflammation, and pus discharge.

Role of Varunadi Taila and Rasnadi Guggulu Vati in Karnasrava

1. Varunadi Taila in Karnasrava

Application

- Karna Purana (instillation of medicated oil in the ears): Varunadi Taila can be used for external administration in the form of Karna Purana, where medicated oil is poured into the ear. This helps in pacifying the aggravated Vata dosha that is responsible for causing dryness, pain, and other associated symptoms in ear diseases.

How it helps

- Vata-Kapha pacification: Varunadi Taila contains Vata- and Kapha-pacifying herbs such as Arka, Varuna, and Amra, which help in relieving ear pain, reducing inflammation, and preventing excessive secretion from the ear.

- Anti-inflammatory and soothing effects: The cooling and anti-inflammatory nature of ingredients like Amra (Mango) and Jambu (Syzygium cumini) reduces swelling, pain, and irritation in the ear canal.
- Srotoshodhana (Channel purification): It helps in clearing the Karna srotas (ear channels), thus reducing infection, clearing ear discharge, and promoting healing of the affected tissues.

Usage: Regular application of Varunadi Taila as Karna Purana can help manage ear infections, reduce inflammation, and soothe discomfort associated with Karnasrava.

2. Rasnadi Guggulu Vati in Karnasrava

Internal Use

- Rasnadi Guggulu Vati is primarily used to treat systemic imbalances that contribute to Kapha-related conditions, such as excessive ear discharge, by clearing Ama (toxins) and reducing inflammation.

How it helps

- Kapha-Vata pacification: The formulation is rich in ingredients like Rasna, Guduchi, and Shunti, which are effective in treating conditions caused by Kapha accumulation. These ingredients help reduce excessive secretion from the ear, clear blockages, and control infection.
- Anti-inflammatory action: The herbs present in Rasnadi Guggulu Vati, like Devadaru and Guggulu, possess strong anti-inflammatory properties, which can help reduce the inflammation of ear tissues and promote faster recovery from infections.
- Ama pachana: The formula also works to digest Ama (toxins), which is often the root cause of chronic ear infections and discharge. By removing toxins from the body, it reduces the recurrence of Karnasrava and prevents further complications.

Usage: Taken internally, Rasnadi Guggulu helps manage underlying infections, promote tissue healing, and maintain the balance of doshas, thus supporting the management of Karnasrava.

CONCLUSION

Both Varunadi Taila and Rasnadi Guggulu Vati are beneficial in managing Karnasrava (ear discharge) from an Ayurvedic perspective. While Varunadi Taila provides local relief through Karna Purana by pacifying Vata and Kapha doshas in the ear, Rasnadi Guggulu works internally to remove toxins, balance doshas, and address the systemic cause of the condition. Together, they can effectively help in reducing ear discharge, inflammation, and promoting healing in Karnasrava.

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