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Case Study**FSSC**
The Gift of Healing**MANAGEMENT OF KARNANADA (TINNITUS) BY AYURVEDA APPROACH: A CASE STUDY****Smita Naram^{1*}, Komal Gawali²****AFFILIATIONS:**

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ABSTRACT:

Tinnitus, a persistent auditory disorder, affects millions worldwide. Conventional treatments, including medications, sound therapy and cognitive behavioural therapy, often provide insufficient relief. Tinnitus poses a significant challenge to clinicians due to its complex pathophysiology and high recurrence rates. In Ayurveda, tinnitus resembles the condition known as "Karnanaada" or "KarnaKshveda," characterized by an imbalance of Vata and Pitta doshas. Tinnitus is marked by symptoms such as unwanted sounds (ringing, buzzing, or hissing), hearing loss, ear fullness, anxiety, and stress. This case report presents a 53-year-old female patient with complaint of ringing in ears diagnosed as Tinnitus and Karnanda according to Ayurveda on 20th June 2024, treated effectively with Ayurvedic medicines and lifestyle modifications. Significant improvements were observed in symptoms and quality of life after 90 days of treatment. Ayurvedic approaches, focusing on dosha balance, diet, and stress management, offer a promising complementary therapy for managing tinnitus.

Keywords: Ayurveda, Detoxification, Karnanada, Raktamokshana, Tinnitus

INTRODUCTION

Tinnitus, a pervasive auditory disorder characterized by the perception of unwanted sounds, affects approximately 15% of the global population, impacting significantly on quality of life. Despite advancements in conventional treatments, including pharmacological interventions, sound therapy, and cognitive behavioural therapy, many patients continue to experience persistent symptoms, highlighting the need for alternative approaches.ⁱ

Unilateral tinnitus can also result from chronic exposure to loud noise, acoustic trauma, or semicircular canal dehiscence. Bilateral tinnitus is most associated with age-related hearing loss, noise exposure, acoustic trauma, or otosclerosis. Additionally, individuals who are currently using or have previously used ototoxic medications—such as high-dose acetylsalicylic acid, nonsteroidal anti-inflammatory drugs, aminoglycoside antibiotics (e.g., gentamicin), loop diuretics (e.g., furosemide), and chemotherapeutic agents (e.g., cisplatin, valproic acid, quinine)—may experience bilateral tinnitus. Furthermore, poor sleep and excessive caffeine consumption can also contribute to tinnitus. Ayurveda, the ancient Indian system of medicine, offers a unique perspective on tinnitus, categorizing it under "Karnanaada" or "Karna Kshveda." This traditional knowledge system emphasizes the interplay between bodily humors (doshas), dietary factors, and lifestyle habits in the pathogenesis of disease. Ayurvedic interventions, focusing on dosha balance, stress management, and natural therapies, may provide a complementary solution for tinnitus management.ⁱⁱ

By examining the therapeutic potential of Ayurveda in tinnitus management, this research seeks to:

1. Provide new insights into the pathophysiology of tinnitus from an Ayurvedic perspective
 2. Evaluate the clinical effectiveness of Ayurvedic interventions
 3. Explore the feasibility of integrating Ayurvedic approaches into conventional treatment protocols
- Madhavnidana have explained the etiological factors of tinnitusⁱⁱⁱ

Table 1: Causative factors or Hetu of Tinnitus as per Ayurveda are

Aetiological Factors	Description
Avashyaya (Exposure to cold wind currents)	Exposure to cold winds can aggravate the condition.
Jalakreeda (Swimming)	Swimming may lead to water exposure that affects the ear and exacerbates symptoms.
Karna Kanduyana (Constant rubbing or irritation)	Repeated rubbing or irritation of the ear with fingers or other objects can cause damage and discomfort.
Mithya Yoga of the Shastra (Improper use of instruments)	Incorrect usage of diagnostic or treatment instruments on the ear can lead to issues.
Atiyoga, Ayoga, Mithya Yoga of the Shabda (Improper sound sensations)	Inappropriate sound sensations (too loud, too soft, or absent) can disturb the ear and auditory function.
Factors causing Vata Prakopa	Aggravation of Vata dosha through various factors can contribute to the condition.
Vata dosha	Vata is considered the primary dosha responsible for causing Karnanada (ear-related disorders).

Roopa (Clinical Features)

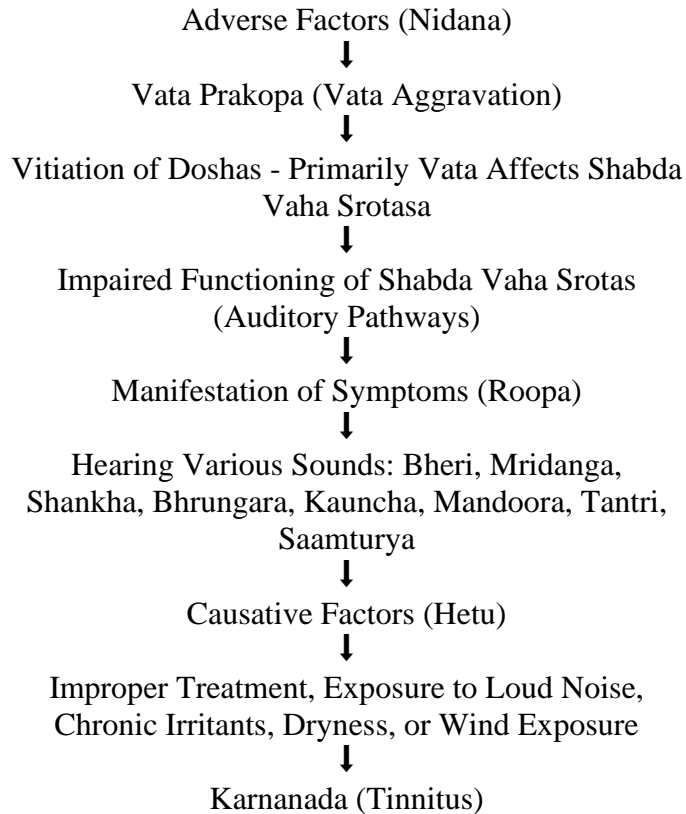
Various types of sounds can be perceived in the auditory channels (*Shabdavaha Srotas*). These include a range of sounds such as:

- **Bheri** – Drum sound
- **Mridanga** – A type of traditional drum
- **Shankha** – Conch shell sound
- **Bhrungara** – Buzzing sound (often likened to that of a bee)
- **Kauncha** – Horn sound
- **Mandoora** – A type of stringed musical instrument
- **Tantri** – Stringed instrument sound
- **Saamturya** – Melodious, harmonious sound

These diverse auditory sensations are experienced within the auditory pathways.



Samprapti (Prognosis)



Case Presentation

Sex: Female

Age: 53 years

Religion: Hindu

Occupation: Housewife

Chief Complaints

Ringing sound from left ear for a year

History of Present illness

The patient reported the onset of a ringing sound in her left ear approximately one year ago. Over the past months, she observed a worsening of the symptoms, which were now accompanied by disturbed sleep and increased irritability. Despite receiving ear drops and medications from allopathic doctors, she experienced no significant relief. As a result, she visited our clinic for Ayurvedic management.

History of past illnesses

No any H/o chronic illnesses

No any H/o nasal allergies

Ayurvedic Assessment:

- Nadi: V^^^ P+++ Heat

- Jivha: Saam

- Mala: Twice a day

- Mutra: 4-5 times a day

- Shabda: Spashtata
- Sparsha: Anushna
- Druk: Prakrut
- Akrti- Madhyam
- Koshtha: Madhyam
- Nidra: Disturbed
- Deha Prakruti: Vata-Pitta
- Diagnosis: Karnanaada (tinnitus)

Examination of Ear

Right: Pinna Normal; EAC Clear; Tympanic Membrane intact; Rinne's Test AC > BC

Left: Pinna Normal; EAC Clear; Tympanic Membrane intact; Rinne's Test AC > BC

Ayurvedic Management:

Medicines: Medicines like Tablet Sukarna, Tablet Gulkacid, Tablet Harntone, Tablet Mahatikta, Tablet Divyashwasa Jivan were given to the patients. The ingredient their pharmacological actions are explained in table 2, 3,4,5 and 6

Table 2: Composition of Tablet Sukarna and its ingredients

Herb/Compound	Botanical Name	Properties
Anantmool	<i>Hemidesmus indicus</i>	Anti-inflammatory, Antioxidant, Blood purifier, Treats skin disorders
Loha Bhasma	<i>Iron (ferrous oxide)</i>	Hematinic, Improves blood circulation, Treats iron deficiency anemia
Pippali	<i>Piper longum</i>	Improves digestion, Respiratory stimulant, Antioxidant
Dalchini	<i>Cinnamomum verum</i>	Antibacterial, Anti-inflammatory, Improves digestion and circulation
Ela	<i>Elettaria cardamomum</i>	Antioxidant, Antimicrobial, Digestive aid, Reduces nausea
Tejpatra	<i>Cinnamomum tamala</i>	Anti-inflammatory, Antioxidant,

Herb/Compound	Botanical Name	Properties
		Antibacterial, Improves digestion
Nagakesara	Mesua ferrea	Antimicrobial, Antioxidant, Anti-inflammatory, Supports skin health
Jati	Callicarpa macrophylla	Antioxidant, Anti-inflammatory, Supports immune system
Kamala	Nymphaea lotus	Calms mind, Antioxidant, Improves skin health
Lavang	Syzygium aromaticum	Antibacterial, Analgesic, Antioxidant, Improves digestion
Shuddha Loha	Ferrous Sulfate	Hematinic, Improves iron levels, Treats iron deficiency anemia
Kalmegh	Pluchea lanceolata	Anti-inflammatory, Antioxidant, Improves digestive and respiratory health
Yashtimadhu	Glycyrrhiza glabra	Antioxidant, Anti-inflammatory, Soothes digestive and respiratory systems
Guduchi	Tinospora cordifolia	Immunomodulatory, Antioxidant, Antipyretic, Supports liver health
Devdaru	Cedrus deodara	Anti-inflammatory, Antibacterial, Supports respiratory health

Herb/Compound	Botanical Name	Properties
Bilva	Aegle marmelos (Bael)	Digestive aid, Antidiabetic, Antioxidant
Amla	Emblica officinalis (Amla)	Immunomodulatory, Antioxidant, Supports skin and digestive health
Baheda	Terminalia belerica	Digestive aid, Antioxidant, Detoxifying, Supports respiratory health
Haritaki	Terminalia chebula	Antioxidant, Digestive aid, Laxative

Table 3: Composition of Tablet Gulkacid

Herb/Compound	Botanical Name	Properties
Amalaki	Emblica officinalis	Antioxidant, Anti-inflammatory
Shatavari	Asparagus racemosus	Antispasmodic, Aphrodisiac
Yashtimadhu	Glycyrrhiza glabra	Antibacterial, Antithrombotic, Hepatoprotective
Shalimali	Bombax malabaricum	Hypolipidemic, Antihyperglycemic
Suvarna Gairik	Ferrum haematite	Cardioprotection
Guduchi	Tinospora cordifolia	Antioxidant, Antipyretic
Bilva	Aegle marmelos	Antianemic, Antidysentric
Mukta Shukti	Ostrea edulis	Antiulcer
Gulab Petal	Rosa centifolia	Anti-inflammatory, Antioxidant
Shankha Bhasma	Turbinella rapa	Anti-inflammatory
Khas	Andropogon	Anticonvulsant,



Herb/Compound	Botanical Name	Properties
	<i>muricatus</i>	Antidepressant
<i>Nishottara</i>	<i>Operculina turpethum</i>	Hepatoprotective, Blood purifier
<i>Chitraka</i>	<i>Plumbago zeylanica</i>	Antifungal, Wound healing
<i>Dalchini</i>	<i>Cinnamomum zeylanicum</i>	Antidiabetic
<i>Ela</i>	<i>Elettaria cardamomum</i>	Antispasmodic, Antiseptic, Diuretic
<i>Karchur</i>	<i>Curcuma zedoaria</i>	Antimicrobial, Antipyretic
<i>Sunthi</i>	<i>Zingiber officinale</i>	Anti-inflammatory
<i>Tejpatra</i>	<i>Cinnamomum tamala</i>	Antidiabetic, Hepatoprotective
<i>Yashad Bhasma</i>	Zinc	Antidiabetic, Antiasthmatic
<i>Triphala</i>	<i>Emblica officinalis</i> , <i>Terminalia chebula</i> , <i>Terminalia bellerica</i>	Immunomodulatory, Antioxidant
<i>Marich</i>	<i>Piper nigrum</i>	Insecticidal, Antifungal, Antiviral
<i>Pippali</i>	<i>Piper longum</i>	Antimalarial, Hepatoprotective
<i>Sajjikshara</i>	<i>Caroxylon griffithii</i>	Antimalarial, Hepatoprotective, Hypoglycemic, Antiallergic, Antifungal

Table 4: Composition of Tablet Harntone and its ingredients

Herb/Compound	Botanical Name	Properties
<i>Arjun</i>	<i>Terminalia arjuna</i>	Cardiotonic, Antioxidant,

Herb/Compound	Botanical Name	Properties
		Antihypertensive, Anti-inflammatory
<i>Loha Bhasma</i>	Iron (ferrous oxide)	Hematinic, Improves blood circulation, Treats iron deficiency anemia
<i>Kesarav Pishti</i>	<i>Crocus sativus</i>	Antioxidant, Aphrodisiac, Antidepressant, Improves skin health
<i>Malkangani</i>	<i>Celastrus paniculatus</i>	Memory enhancer, Nervine tonic, Improves cognition and concentration
<i>Jatamansi</i>	<i>Nardostachys jatamansi</i>	Sedative, Nervine tonic, Antidepressant, Relieves stress and anxiety
<i>Brahmi</i>	<i>Bacopa monnieri</i>	Memory enhancer, Antioxidant, Adaptogenic, Reduces anxiety and stress
<i>Shankhapushpi</i>	<i>Convolvulus pluricaulis</i>	Memory enhancer, Brain tonic, Improves mental clarity and focus
<i>Prabhakar Vati</i>	Combination of various herbominerals	Improves digestion, strengthens immunity, Relieves cough and cold
<i>Trinetra Ras</i>	Combination of herbominerals	Enhances immunity, Treats respiratory issues,

Herb/Compound	Botanical Name	Properties
		Antioxidant
<i>Kamdudha Ras</i>	<i>Combination of herbominerlas</i>	Reduces acidity, Treats gastritis, Calms pitta dosha
<i>Mukta Pisthi</i>	Pearl (natural)	Antacid, improves skin health, Reduces stress and anxiety
<i>Praval Pishti</i>	Coral (coral powder)	Antacid, improves bone strength, Supports healthy digestion
<i>Swarnamakshik Bhasma</i>	Mica and Gold combination	Rejuvenating, improves metabolism, Enhances immunity
<i>Abhrak Bhasma</i>	Mica (mineral)	Rejuvenating, enhances vitality, Strengthens bones and muscles
<i>Akika Bhasma</i>	Agate (gemstone)	Improves digestion, Enhances immunity, Antioxidant
<i>Vamshalochan</i>	<i>Bambusa arundinacea</i> (Bamboo)	Anti-inflammatory, improves vision, Supports respiratory health
<i>Shuddha Shilajit</i>	<i>Asphaltum</i> (Mineral pitch)	Rejuvenative, Energizing, Antioxidant, Improves vitality and stamina
<i>Ashwagandha</i>	<i>Withania somnifera</i>	Adaptogen, Stress reliever, Immune booster, Increases energy and vitality

Table 5: Composition of Tablet Mahatikta and its ingredients

Herb/Compound	Botanical Name	Properties
<i>Amalaki</i>	<i>Emblica officinalis</i>	Immunomodulatory, Antioxidant
<i>Amlavetas</i>	<i>Garcinia pedunculata</i>	Antihyperglycemic, Antimicrobial
<i>Ativisha</i>	<i>Aconitum heterophyllum</i>	Analgesic, Anti-inflammatory
<i>Bibhitak</i>	<i>Terminalia bellerica</i>	Immunomodulatory, Antioxidant
<i>Daruharidra</i>	<i>Berberis aristata</i>	Hypolipidemic, Antidiarrheal
<i>Dhanyayas</i>	<i>Fagonia cretica</i>	Antimicrobial, Antiseptic, Anti-inflammatory
<i>Guduchi</i>	<i>Tinospora cordifolia</i>	Antipyretic, Antispasmodic, Anti-inflammatory, Antioxidant, Anti-arthritic
<i>Haridra</i>	<i>Curcuma longa</i>	Antibacterial, Antifungal, Anti-inflammatory
<i>Haritaki</i>	<i>Terminalia chebula</i>	Antiviral, Antifungal, Antibacterial
<i>Indravaruni</i>	<i>Citrullus colocynthis</i>	Antimicrobial, Hypolipidemic, Antioxidant
<i>Katuka</i>	<i>Picrorhiza kurroa</i>	Antidiabetic, Hepato-protective
<i>Kiratikta</i>	<i>Swertia chirayita</i>	CNS Depressant, Antiviral
<i>Kutaja</i>	<i>Holarrhena antidysenterica</i>	Antibacterial
<i>Murva</i>	<i>Marsdenia tenacissima</i>	Antidiarrheal, Anti-inflammatory
<i>Musta</i>	<i>Cyperus rotundus</i>	Antipyretic, Antidiabetic



Herb/Compound	Botanical Name	Properties
<i>Nimba</i>	<i>Melia azadirachta</i>	Anti-inflammatory, Antidiabetic
<i>Padmak</i>	<i>Prunus cerasoides</i>	Antipruritic, Anti-inflammatory
<i>Parpat</i>	<i>Oldenlandia corymbosa</i>	Antimicrobial
<i>Patha</i>	<i>Cissampelos pareira</i>	Antiasthmatic, Diuretic
<i>Patola</i>	<i>Trichosanthes dioica</i>	Laxative, Antipyretic
<i>Pipali</i>	<i>Piper longum</i>	Anti-inflammatory
<i>Saptaparna</i>	<i>Alstonia scholaris</i>	Blood purifier, Antibacterial
<i>Shatavari</i>	<i>Asparagus racemosus</i>	Antispasmodic, Aphrodisiac
<i>Shvet Sarava</i>	<i>Hemidesmus indicus</i>	Immunomodulatory, Depurative (purifies blood), Anti-inflammatory, Antihyperuricemic, Anti-gout
<i>Shvet Chandan</i>	<i>Santalum album</i>	Antidysentery, Anti-ulcer
<i>Trayamana</i>	<i>Gentiana kurroo</i>	Hepatoprotective, Anti-inflammatory
<i>Ushira</i>	<i>Vetiveria zizanoides</i>	Anticonvulsant
<i>Vacha</i>	<i>Acorus calamus</i>	Anticonvulsant, Antidepressant, Antihypertensive, Anti-inflammatory
<i>Vasa</i>	<i>Adhatoda vasica</i>	Bronchodilator, Antimicrobial, Anti-inflammatory, Antispasmodic
<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i>	Antibacterial, Antithrombotic

Table 6: Composition of Tablet Divyashwasa Jivan and its ingredients

Herbs/Compound	Botanical Name	Properties
<i>Sodii Muras</i>	<i>Sodium Chloride (Salt)</i>	Antiseptic, promotes digestion, Reduces swelling
<i>Pippali</i>	<i>Piper longum</i>	Improves digestion, Respiratory stimulant, Antioxidant
<i>Maricha</i>	<i>Piper nigrum</i>	Digestive aid, Antioxidant, Improves bioavailability of other herbs (Nair, 2007)
<i>Sunthi</i>	<i>Zingiber officinale</i>	Anti-inflammatory, Antioxidant, Improves digestion
<i>Hinga</i>	<i>Ferula narthex</i>	Antispasmodic, Anti-inflammatory, Treats digestive disorders
<i>Kantakari</i>	<i>Solanum xanthocarpum</i>	Antimalarial, Anti-inflammatory, Respiratory tonic
<i>Kudzu</i>	<i>Clerodendrum serratum</i>	Antibacterial, Antiviral, Improves respiratory health
<i>Vasa</i>	<i>Adhatoda vasica</i>	Bronchodilator, Anti-inflammatory, Treats respiratory conditions
<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i>	Antioxidant, Anti-inflammatory, Soothes digestive and respiratory systems
<i>Tulsi</i>	<i>Ocimum sanctum (Holy Basil)</i>	Adaptogen, Immunomodulatory, Antioxidant,



Herbs/Compound	Botanical Name	Properties
		Stress reliever
Haritaki	<i>Terminalia chebula</i>	Antioxidant, Digestive aid, Laxative
Kachura	<i>Alpinia galanga</i>	Antibacterial, Anti-inflammatory, Digestive stimulant
Karkatshringi	<i>Pistacia integerrima</i>	Antioxidant, Antiinflammatory, Improves circulation
Dashamool	Combination of 10 roots, including:	Rejuvenative, Pain relief, Immune booster, Supports respiratory health
Shyonaka	<i>Oroxylum indicum</i>	Anti-inflammatory, Antioxidant, Supports cardiovascular health
Indrajao	Seeds of <i>Holanaria antidysentrica</i>	Antioxidant, Antidiabetic, Anti-inflammatory
Bilva	<i>Aegle marmelos</i>	Digestive aid, Antidiabetic, Antioxidant
Shalaparni	<i>Desmodium gangeticum</i>	Anti-inflammatory, Antioxidant, Treats digestive disorders
Vishala	<i>Cintrullus colocynthes</i>	Anti-inflammatory, analgesic,
Chirabilva	<i>Holoptelea integrifolia</i>	Anti-inflammatory, Immunomodulatory, Pain relief
Shalaparni	<i>Dermodium gangeticum</i>	Anti-bacterial, Anti-fungal, Treats respiratory ailments
Gokshura	<i>Tribulus terrestris</i>	Improves libido, Enhances strength, Antioxidant

2. Detoxification:

- Matra Basti (thrice a week for 2 weeks)

A procedure where 40ml Balada Tail administered through anal route.

- Dhupana Chikitsa (inhalation therapy)

Fumes of combination of *Shunthi* (*Zingiber officinale*) Jeeraka (*Cuminum cyminum*), *Yavani* (*Trachyspermum ammi*) made to inhale one nostril at a time and was asked to exhale via mouth.

- Raktamokshana (4 sittings)

A process of bloodletting from the post auricular region (as required in this case)



3. Dietary Recommendations:

- Avoid milk, dairy, sour, salty, fermented foods
- Avoid white sugar, junk food, bakery products
- Avoid wheat/gluten, meat
- Emphasize vegetables (60%), protein (30%),

carbohydrates (10%)

4. Lifestyle Recommendations:

- Regular exercise, Yogasana (Shirshasana)
- Stress avoidance

After 2.5 months of treatment, the patient reported 80% relief from tinnitus symptoms.

Discussion:

Approximately 30% of population experience tinnitus sometime in their lives. This case demonstrates the potential of Ayurvedic interventions in managing tinnitus. The comprehensive treatment plan addressed the patient's imbalanced doshas, reduced symptoms, and improved quality of life. According to Ayurveda, tinnitus can result from an imbalance in the *Vata* and *Pitta* doshas, often linked to disturbances in the *Shiras* (head region) and *Karna* (ear). Tinnitus may also be caused by *Ama* (toxins), *Rasa* (lymph), and *Rakta* (blood) vitiations.

- **Vata Dosha imbalance:** Excessive Vata can lead to dryness and instability in the ear and nervous system, causing ringing or buzzing sounds.
- **Pitta Dosha imbalance:** Excessive Pitta can create heat and inflammation, leading to a feeling of fullness, pressure, or noise in the ear.
- **Rakta and Rasa Dosha imbalance:** Poor circulation or toxins in the body can affect the auditory system, contributing to tinnitus.

Treatment in Ayurveda, therefore, focuses on pacifying these doshas, promoting detoxification, improving circulation, and rejuvenating the nervous and auditory systems.

Conclusion:

Tinnitus can be effectively managed by Ayurveda with the help of medicines like tablet Sukarna, tablet Gulkacid, tablet Harntone, tablet Mahatikta, tablet Divyashwasa Jivan, detoxification therapy like Matrabasti, Dhupan chikitsa and Raktamokshana along with dietary and lifestyle modifications. Ayurvedic medicine provides a comprehensive and holistic approach to managing tinnitus by addressing the root causes, whether they are related to dosha imbalances, stress, or poor circulation. The herbs and therapies used in Ayurveda not only alleviate the symptoms of tinnitus but also improve overall well-being and quality of life.

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