

Review Article

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## THERAPEUTIC IMPORTANCE OF *HUHURA PITA (GYNANDROPSIS GYNANDRA)* W.S.R. TO ROLE IN THE MANAGEMENT OF OTALGIA

Dr. Meghnandini Khandare<sup>1</sup>, Dr Sarita Ghanshyam Gharde<sup>2</sup>

<sup>1</sup>Professor, Dept. of Dravyaguna, LN Ayurved College and Hospital, Bhopal (MP) India.

<sup>2</sup>Professor, Dept. of Shalaky Tantra, LN Ayurved College and Hospital, Bhopal (MP) India.

### Abstract

*Gynandropsis gynandra* commonly known as *Pandharitilvan*, it used as counter-irritant, helps to cure headache and otalgia. The major chemical constituents of plant are terpenes, sterols, fatty acids,  $\beta$ -carotene, flavonoids, alkaloids and glycosides, etc. As per Ayurveda literatures this plant uses for treating *Gulma*, *Asthila*, *Krmiroga*, *Kandu* and *Karnaroga*. The utilization of plant in *Karnaroga* (Ear diseases) is very important since it play important therapeutic role in case of otalgia. The leaves are used as rubefacient, helps to treat various types of painful conditions like neuralgia, rheumatism and otalgia, etc. The leaves are rubbed on the affected parts to relives pain and stiffness. The *Shoolghni* and *Vatahara* properties of plant contributed towards the management of otalgia/ ear pain. The plant also acts as appetizer and cardiac tonic. The *Vata* and *Kapha hara* properties of plant impart health benefits in many diseases related to the *Vata* and *Kapha* vitiation.

**Key-Words:** *Ayurveda, Gynandropsis gynandra, HuhuraPita, Otagia.*

## Introduction

The human body made up by many organs and some of them are sensory organs; Ear (*Karna*) is one of them. *Karna* is considered seat of *Shravanendriya*, this sensory organ is predominant by *Akash mahabhuta* and it is related with *Shabda*. This organ also suffered by various pathological conditions like *Karnashula* (otalgia). This is disease of ear described under the heading of *Karnaroga*. Ayurveda described various therapeutic options for curing otalgia including uses of plant *Gynandropsis gynandra*. This plant play important role in many diseases associated with pain and inflammation, the leaves of plant offers remarkable benefits in ear pain [1-4].

### *Gynandropsis gynandra*

*Gynandropsis gynandra* is a plant that belongs to the family *Capparidaceae* possesses strong smell, with 0.5 - 1 m high, this plant found at warmer parts of India and used for treating different inflammatory conditions. The other synonyms of plant are *Hurhuria*, *Talvani*, *Hulhul*, *Hurhur*, *Bhatvan*, *Bugra*, *Nal valai* and *Vaminta*, etc.

Microscopically the plant leaf posses dorsiventral nature, there are large number of glandular trichomes present on both the epidermis, vascular bundles also present in groups and stomata are anomocytic type. The bruised leaves used to treat headache, rheumatism and neuralgia, etc. also considered helpful for localized pain. The roots of plant offer sharp taste thus removes *Vata*, helps to cure ulcers, pain and spleen enlargement, etc. Plant also used as appetizer and cardiac tonic [5-10].

### Ayurveda Properties

|                  |   |
|------------------|---|
| ✚ <i>Rasa:</i>   | <i>Katu</i>   |
| ✚ <i>Guna:</i>   | <i>Laghu</i> and <i>Ruksha</i>  |
| ✚ <i>Virya:</i>  | <i>Sheeta</i>   |
| ✚ <i>Vipaka:</i> | <i>Katu</i>   |
| ✚ <i>Karma:</i>  | <i>Shoolghni</i> , <i>Hridya</i> , <i>Pittala</i> and <i>Vatahara</i> |

### **Chemical constituents:**

The leave of plant contains Carotenoids, glycosides, Flavonoids, Saponins, Cyanogenic Glycosides, Tannins and Triterpenes, etc. The seeds contain fixed oil, oleoresin and essential oil, etc.

### **Therapeutic Uses of Plant as per Ayurveda:**

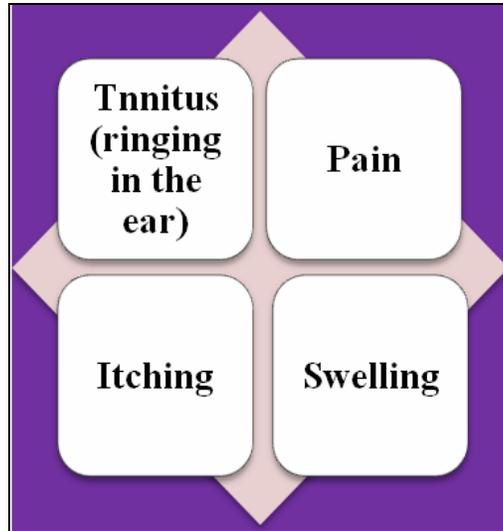
Various parts of plant viz. leaves, seeds and roots used for medicinal purpose. It is recommended in *Gulma*, lump and considered beneficial for prostate enlargement, etc. It is advised for worm infection, ear diseases and Kandu Pruritus, etc. Ayurveda texts described that this plant can be used for treating pain, swelling, cough, asthma, fever and urinary diseases, etc.

- ✓ Seed of plant used as carminative, antiseptic and anthelmintic, etc.
- ✓ Leaves offers anti-inflammatory and sudorific properties thus juice of leaves used to treat ear pain.
- ✓ Leaves and seeds poultice is used for painful joints.

### **Ear pain (Otalgia):**

Ear pain (Otalgia) is one of the most common problems associated with pathological conditions of sensory organs. Various diseases including ear infection may become causes of otalgia. This can be categorizes as primary and referred otalgia; primary otalgia involves pain in ear which originates inside the ear while in referred otalgia the ear pain originates from the outside of ear. The typical causes of primary otalgia may be otitis media, mastoiditis, auricular infections and external otitis, etc.

Otalgia is very common in children and also in elderly people, the chances of infections increases provenance of cases. The common symptoms of Otalgia are depicted in **Figure 1**.



**Figure 1: Common symptoms of Otolgia**

#### **Management of Otolgia:**

- Analgesics and anti-inflammatory medicines
- Antimicrobial agents
- Maintenance of hygiene and avoidance of causative factors
- Cleaning of ear and suitable dietary regimen.

#### **Ayurveda Management:**

- ✚ *Nirgundi taila* for *Karnapoorana*
- ✚ *Triphala guggulu* as internal medication
- ✚ *Paribhadra* leaves for *Karna purana*
- ✚ *Irimejadi Taila* for *Gandusha*
- ✚ *Gynandropsis gynandra* leaves
- ✚ *Pathya Ahara-Vihara*, etc.

### **Role of *Gynandropsis gynandra* in Otagia:**

Ayurveda described various therapeutic options for curing otalgia including uses of plant *Gynandropsis gynandra*. The leaves help to treat various painful conditions including otalgia. The leaves applied locally on the affected parts to relieves symptoms of pain and inflammation. The local irritant action of leaves provides natural therapeutic in case of otalgia/ ear pain. The *Shoolghni* and *Vatahara* properties of plant contribute towards the management of pain and inflammation respectively. The *Kapha hara* property of plant helps to prevent coughing, congestion and infection which are the most important causes of ear pain.

The *Katu Rasa* helps to relieves local toxins, *Laghu Guna* of plant imparts local action in affected part, *Ruksha Guna* acts as counter irritant thus suppress ear pain, *Sheeta Virya* of leaves provides relief in burning sensation and itching and anti inflammatory effect reduces edema.

The local effect of plant helps to clear *Srotoavarodha* thus improves circulation and boost up natural healing action. Otagia is mainly associated with oropharyngeal and throat infections, the antimicrobial action of *Gynandropsis gynandra* controls infection in ear region thus prevent severity of disease locally. The literature revealed that uses of *Gynandropsis gynandra* leaves helps to reduces symptoms of *Dhvani*, *Sopha*, *Vidaha* and *Kandu*, etc.

The *Krimihara* and *Vranaropana* property of plant known to possess health benefits in *Karnasula*, since *Krimihara* effect reduces infection and *Vranaropana* property improves natural process of wound healing. The active ingredient of plant helps to reduce tenderness in the ear, itching, sense of fullness and heaviness, etc. The anti-inflammatory effect of plant leaves reduces swelling and *Ati ruk* associated with otalgia. The analgesic, antimicrobial and cleaning action of plant provides all types of health benefits in ear problem including otalgia [6-9].

## Conclusion

*Gynandropsis gynandra* is plant also known as *Pandharitilvan*, used to cure *Gulma*, *Asthila*, *Kandu* and *Karnaroga*. It has a significant therapeutic role in otalgia and other *Karnaroga*. The management of otalgia/ear discomfort was aided by the plant's *Shoolghni* and *Vatahara* qualities. The *Katu Rasa* aids in the elimination of local toxins; the plant's *Laghu Guna* imparts local action to the affected area; the *Ruksha Guna* serves as a counterirritant, thereby suppressing ear pain; the *Sheeta Virya* eases burning and itching sensation while anti-inflammatory impact lessens edema. All kinds of health benefits, including relief from otalgia, provides by the plant's analgesic, antibacterial and cleansing properties.

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