

## COMPREHENSIVE APPRAISAL KARNA ROGA W.S.R. KARNASHRAVA IN AYURVEDA & CONTEMPORARY SCIENCE

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### ABSTRACT

There is difference of opinions among the Acharya about the total number of karna rogas. In this set of disorders of karna, the diseases belong to Shabdendriya have also been included. Acharya Charaka has described karna rogas in a separate chapter. There is an explanation of these disorders belonging to karna in trimarmiya chikitsa chapter of Charaka Samhita. According to Charaka there are four types of karna rogas based on doshas. They are Vataja, Pittaja, Kaphaja & Sannipataja. In these four types, all the karna rogas are included. Since Charaka belongs to Kayachikitsa School of thoughts, it is natural that a very short description of these disorders of urdhwa jatrugata rogas is found. Charaka has also mentioned a short method of treatment for karna rogas. One, among the treatments is karna purana. Interestingly, there is no mention of disorders of karna pali. (Ch. Chi. 26/71). 1. Vatika Karnaroga 2. Paittika Karnaroga 3. Shalaishmika Karnaroga 4. Sannipatika Karnaroga. According to Sushruta there are 28 types of karna roga as explained in 20th chapter of uttara tantra. Karnashrava is the disease of Karnaroga, it is well described by acharya Sushruta. Karnashrava can compare with Otorrhoea. Avashyaya (Dew), Pratishtyaya (Common cold), Jalakrida (water entry in the ear), Karnakanduyana, Mithyayogen shastrasya, Shirobhighata and Prapakat vidradhe are the main causes of Karnashrava. There are not any specific purvarupa of karnasrava. But increase of wax formation, itching sensation heavyness of the ear can be taken as purvarupa. (A. H. Su. 11/14). Acharya Madhavakara say, that Aavyakta lakshana is the purvarupa of vyadhi. Nasya, Dhumapana, Karnapuran, Karna prakshalan and Karna Aschyotan are best modality to treat Karnashrava.

**KEYWORDS:** Karnashrava, Karna roga.

### INTRODUCTION

There is difference of opinions among the Acharya about the total number of karna rogas. In this set of disorders of karna, the diseases belong to Shabdendriya have also been included. Acharya Charaka has described karna rogas in a separate chapter. There is an explanation of these disorders belonging to karna in trimarmiya chikitsa chapter of Charaka Samhita. According to Charaka there are four types of karna rogas based on doshas. They are Vataja, Pittaja, Kaphaja & Sannipataja. In these four types, all the karna rogas are included. Since Charaka belongs to Kayachikitsa School of thoughts, it is natural that a very short description of these disorders of urdhwa jatrugata rogas is found. Charaka has also mentioned a short method of treatment for karna rogas. One, among

the treatments is karna purana. Interestingly, there is no mention of disorders of karna pali. (Ch. Chi. 26/71). 1. Vatika Karnaroga 2. Paittika Karnaroga 3. Shalaishmika Karnaroga 4. Sannipatika Karnaroga. According to Sushruta there are 28 types of karna roga as explained in 20th chapter of uttara tantra. In Sushruta Samhita sutra sthana 16<sup>th</sup> chapter there is a description of karnapali vardhanajanya disorders. Acharya Sushtra has not explained the disorders of karnapali in uttara tantra, because there is no use of Shalaka while treating these disorders. Thus he has explained the disorders of karnapali in the context of karnapali vardhana. - the ancient procedure of increasing the size of lobule of ear. Also in the 30 Karna Rogas are mentioned in Sharangadhara Samhita, Among them, 18 are karna srotasgata rogas, 7 are karnapali rogas & remaining 5

rogas belong to karnamula. Sharangandhara is the only person to explain the disorders of karnamula, but he has not explained the treatment aspect. 1.Vataja Karnaroga 2.Pittaja Karnaroga 3.Kaphaja Karnaroga 4. Raktaja Karnaroga 5.Sannipataja Karnaroga 6. Karna Vidradhi 7.Karnanada 8. Karnarubda 9.Putikarna 10.Karnarsha 11. Karnahalika 12.Badhirya 13.Tantrika 14.Karnakandu 15. Karna Shaskuli 16.Krimi Karna 17.Karna Nada 18.Karna Pratinaha 19. Utpata 20.Palishosa 21.Vidari 22.Dukhavardhana 23.Paripota 24.Parilehi 25.Pippali 26.Vataja Karnamula roga 27.Pittaja Karnamula roga 28.Kaphaja Karnamula roga 29.Sannipataja Karnamula roga 30.Raktaja Karnamula roga. 1-18 no. are included in karna srotasgata rogas. 19-25 no. are the diseases of

karnapaligata karna rogas. 26-30 no. are included in the karnamulagata karna roga. The author of Madhava Nidana followed the description of Charaka & Sushruta for the classification of karna rogas. The karna rogas are explained under the chapter of Karna Rogadhikara. He too, followed Sushruta in the classification of karna rogas. (B. P. M. Kh. 64/1-4). He has also explained the karna roga according to Charaka i.e. Vataja, Pittaj, Kaphaj & Sannipataj. He also explains the Paripota, Utapata, Unmanthaka, Dukh vardhana & Parilehi as karna paligata rogas. Other than Brihatrayi & Laghutrayi authors, the description of karna rogas are found in Gadanigraha, Vangasena & also in other Chikitsa Granthas.

Table-1:

| Karna Rogas        | Cha. | Su. | A.H.    | M.N. | B.P. | Shar.  |
|--------------------|------|-----|---------|------|------|--------|
| Vatika             | +    | -   | -       | -    | -    | -      |
| Paatika            | +    | -   | -       | -    | -    | -      |
| Shlaishmika        | +    | -   | -       | -    | -    | -      |
| Sannipatika        | +    | -   | -       | -    | -    | -      |
| Karnashula         | -    | +   | +       | +    | +    | +      |
| Karnanada          | -    | +   | +       | +    | +    | +      |
| Badhirya           | -    | +   | +       | +    | +    | +      |
| Karna kshweda      | -    | +   | -       | +    | +    | +      |
| Karna srava        | -    | +   | -       | +    | +    | -      |
| Karna kandu        | -    | +   | +       | +    | +    | +      |
| Karna gutha        | -    | +   | +       | +    | +    | -      |
| Karna pratinaha    | -    | +   | +       | +    | +    | +      |
| Krimi karna        | -    | +   | +       | +    | +    | +      |
| Karna vidradhi (A) | -    | +   | +       | +    | +    | +      |
| Karna vidradhi (D) |      |     |         |      |      |        |
| Karna paka         | -    | +   | +       | +    | +    | -      |
| Putikarna          | -    | +   | +       | +    | +    | +      |
| Karna shotha       | -    | +   | +       | +    | +    | +      |
| Karnarbuda         | -    | +   | +       | +    | +    | +      |
| Karnarsha          | -    | +   | +       | +    | +    | +      |
| Paripota           | -    | +   | +       | +    | +    | +      |
| Utpata             | -    | +   | +       | +    | +    | +      |
| Unmathaka          | -    | +   | Gallira | +    | +    | +      |
| Dukha vardhana     | -    | +   | +       | +    | +    | +      |
| Parilehi           | -    | +   | Lehika  | +    | +    | +      |
| Karnahallika       | -    | -   | +       | -    | -    | -      |
| Karnashashkuli     | -    | -   | +       | -    | -    | -      |
| Kuchikarnaka       | -    | -   | +       | -    | -    | -      |
| Karna Pippali      | -    | -   | +       | -    | -    | +      |
| Vidarika           | -    | -   | +       | -    | -    | Vidari |
| Palishosa          | -    | -   | +       | -    | -    | +      |
| Tantrika           | -    | -   | +       | -    | -    | +      |
| Paatika            | +    | -   | -       | -    | -    | -      |
| Shlaishmika        | +    | -   | -       | -    | -    | -      |
| Sannipatika        | +    | -   | -       | -    | -    | -      |
| Karnashula         | -    | +   | +       | +    | +    | +      |
| Karnanada          | -    | +   | +       | +    | +    | +      |
| Badhirya           | -    | +   | +       | +    | +    | +      |
| Karna kshweda      | -    | +   | -       | +    | +    | +      |
| Karna srava        | -    | +   | -       | +    | +    | -      |
| Karna kandu        | -    | +   | +       | +    | +    | +      |

|                    |   |   |         |   |   |        |
|--------------------|---|---|---------|---|---|--------|
| Karna gutha        | - | + | +       | + | + | -      |
| Karna pratinaha    | - | + | +       | + | + | +      |
| Krimi karna        | - | + | +       | + | + | +      |
| Karna vidradhi (A) | - | + | +       | + | + | +      |
| Karna vidradhi (D) |   |   |         |   |   |        |
| Karna paka         | - | + | +       | + | + | -      |
| Putikarna          | - | + | +       | + | + | +      |
| Karna shotha       | - | + | +       | + | + | +      |
| Karnarbuda         | - | + | +       | + | + | +      |
| Karnarsha          | - | + | +       | + | + | +      |
| Paripota           | - | + | +       | + | + | +      |
| Utpata             | - | + | +       | + | + | +      |
| Unmathaka          | - | + | Gallira | + | + | +      |
| Dukha vardhana     | - | + | +       | + | + | +      |
| Parilehi           | - | + | Lehika  | + | + | +      |
| Karnahallika       | - | - | +       | - | - | -      |
| Karnashashkuli     | - | - | +       | - | - | -      |
| Kuchikarnaka       | - | - | +       | - | - | -      |
| Karna Pippali      | - | - |         | - | - | +      |
| Vidarika           | - | - |         | - | - | Vidari |
| Palishosa          | - | - |         | - | - | +      |
| Tantrika           | - | - |         | - | - | +      |

Karnashrava is mentioned by all acharyas we can compare with Otorrhoea in modern science.

#### AIMS AND OBJECTIVES

1. To comprehensive Appraisal Karna Roga w.s.r. Karnashrava in Ayurveda

2. To comprehensive Appraisal Karna Roga w.s.r. Karnashrava in contemporary Science.

#### 3. Karnashrava in Ayurveda

Karnashrava literary means, any type of discharge, exudate from ear. Different types of karnashrava are observed in different conditions mentioned below.

| Condition                        | Type of karnashrava   |
|----------------------------------|---|
| Vataja karnaroga                 | Thin (watery) discharge.  |
| Pittaja karnaroga                | Yellow, foul smelling discharge.  |
| Kaphaja karnaroga                | White, wet (thick) discharge.   |
| Sannipataja karnaroga            | Increased characteristic of doshaja (multicolour) discharge.                                |
| Vataja karnashula (Pakvavastha)  | Watery (serous), scanty discharge.  |
| Pittaja karnashula (Pakvavastha) | Yellowish watery (serous) discharge.  |
| Kaphaja karnashula (Pakvavastha) | White, thick discharge.   |
| Raktaja karnashula (Pakvavastha) | Pittaja karnashula like yellowish watery (serous) discharge but increased rulent discharge. |
| Karna sansrava                   | Profuse purulent discharge.   |
| Karna vidradhi                   | Reddish, yellowish, blackish, blood stained (profuse & pulsatile) discharge.                |
| Karnapaka                        | Moist gangrene like discharge (abundance of serous exudation).                              |
| Putikarna (Su. U. 20)            | Thick, Purulent discharge.  |
| Putikarna (A. H. Ut. 17)         | Profuse, purulent, thick discharge.   |

Karnasrava is considered as a disease in ayurvedic texts (Su. Ut. 20/10), Karnasrava is a disease which has discharge / oozing as dominant symptoms. It is described as separate disease. But according to modern medical science, it is a symptom only. Maharshi Sushruta has mentioned it as karnasansrava. Madhava & other follower have collected his references & verses. Charaka hasn't described about karnasrava. Charaka has synoptically incorporated karnasrava in the diseases of ear (Ch. Chi. 26/127, 128). He has counted it due to vitiated vata, pitta, kapha & sannipata, doshas.

Acharya vagbhata has incorporated karnasrava in karnashula disease & stated that it is due to vitiation of vata, pitta, kapha etc. dosha in his karnaroga vignaniya adhyaya. (A. H. U. 17 & 18).

There are five means of understanding a disease explained in ayurvedic texts (M. N. 1/4) (A. H. N. 1/2) i.e.

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

#### Nidana

Knowledge of nidana is important for complete knowledge of the disease & nidana parivarjana is said to be kind of a treatment itself.

1. **Avashyaya (Dew):** Prolong exposure leads to vitiation of kapha. Vitiated kapha produces itching in external auditory canal. Patients are stimulated to scratch the ear to relieve itching & discomfort.
2. **Pratishyaya (Common cold):** Pratishyaya is said to be a cause of all the urdhwa jatrugata disease. Pratishyaya is a disease caused by vitiated vata. Infection of nasopharynx and nose itself are spreaded to eustachian tube due to pratishyaya and it leads to eustachian tube dysfunction & creates negative pressure in the middle ear. Specially acharya vagbhata, has considered pratishyaya as a nidana of karnasrava.
3. **Jalakrida (water entry in the ear):** Due to jalkrida (swimming, deep sea diving), bath into the river, sea, fountains or sprinkling water etc., water enters into the external auditory canal may cause moistening of wax. The moistened wax swells up & occludes the meatus causing itching sensation, giddiness blockage & noises in the ear. This leads to swelling the skin of the external auditory canal and cause srava beside this contamination can occur due to polluted water.
4. **Karnakanduyana:** Karnakanduyana is itching of the ear. During itching rupture of the skin of external auditory canal & tympanic membrane may be possible due to insertion of external objects such as stick, grass, hair pin, pencil etc. to relieve itching. These all cause kshataja vrana & most of these items

are contaminated & not being sterilized. The use of any of these things causes infection lead, the kshataja vrana to dushta vrana which causes karnasrava.

5. **Mithayogen shastrasya:** Improper introduction of instruments by unskilled persons may injure the external ear or even rupture tympanic membrane. More over if the instruments are not properly sterilized may cause infection.
6. **Shirobhighata:** Head injuries may cause karnasrava, initially it will be (haemorrhage fresh blood discharge) Raktasrava, later on if it is untreated opportunistic pathogen invades & watery or purulent discharge may be followed.
7. **Prapakat vidradhe:** When an inflammation increases, it results in an abscess formation. An abscess is a localised collection of pus surrounded by a healthy zone of WBCs. Prapaka of vidradhi leads to bursting of it and collected pus drains out. So puyasrava occurs in karnasrava.

#### Purvarupa

There are not any specific purvarupa of karnasrava. But increase of wax formation, itching sensation heaviness of the ear can be taken as purvarupa. (A. H. Su. 11/14). Acharya Madhavakara say, that Avyakta lakshana is the purvarupa of vyadhi. (M. N.)

#### Rupa

Karnasrava itself a rupa & other symptoms, which may be found in some patients are: Ear disease are described to be of twenty-eight varieties in shalakya tantra. Depending on the predominance of dosha, these can be kept under the four categories i.e. vatika, paittika, kaphaja and sannipatika (Ch. Chi. 26/127, 218).

**Vatika karnasrava:** Tanusrava (Thin discharge), Asravana (Inability of hear), Karnanadu (Tinnitus), Atiruka (Excessive pain) & Karnamalasya shosha (Drying of ear wax).

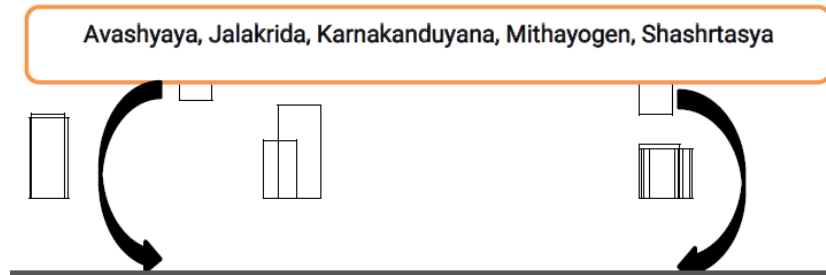
**Paittika karnasrava:** Pita, Puti sravana (Yellow and putrid discharge), Shopha (Oedema), Raga (Redness), Darana (Ulceration) & Vidaha (Burning sensation).

**Kaphaja karnasrava:** Shukla - Snigdha sruti (White and urtous discharge), Alpa ruka (Dull pain), Vaishrutya (Defective hearing), Kandu (Itching), Sthirata (stiffness) & Shopha (Oedema).

**3.1 Sannipatika Karnasrava:** Srava-adhika doshavarna (Extremely putrid discharge containing colours) & Sarvani rupani (All the signs & symptoms of doshas).

#### 3.4 Samprapti

Samprapti is the process of manifestation of the diseases by the morbid dosha (humours) which are circulating all over the body. Jati and Aagati are synonyms of samprapti. (M. N. 1/10) (A. H. N. 1/8).



Samprapti of karnasrava is of two types

1. Nija i.e. initiated by doshainvolvement.
2. Aagantuja i.e. initiated by trauma or injury.

### Nija

After nidana sevana of doshas specifically vata & kapha. They are getting accumulated in the body. When they find, any precipitating factors, they try to leave their places and get localised in any other organ i.e. Bahya karna, further they vitiate and make twaka, rakta & mamsa dusti. In this stage, if they remain untreated, vitiate further to make vranashopha in the external ear, which leads to karnasrava.

### Aagantuja

Pricking of the ear or improper introduction of instruments in the ear for wax removal, or mopping etc. lead to cause an injury to skin of the external auditory canal. Generally it heals by own, but if it is caused by unsterile instruments, matchstick etc. or these all are introduced after injury, causes twaka, rakta & mamsa dusti directly & leads to dusta vrana formation. If nidana sevana is continued in dusta vrana it leads to karnasrava.

### 3.4 Chikitsa

Chikitsa, is the curative aspect & this has to be done simultaneously giving due importance to Nidana parivarjana i.e. preventive measures of causes. So, nidana parivarjana is the 1st step in combating the disease & forms the part of line of treatment (Ch. Su. 30/26) (Su. Ut. 1/25). Acharya Charaka (Ch. Su. 5/) and Acharya Vagbhata (A. H. Su. 2/3) advocate to do karnapurana daily to avoid the diseases of the ear. Acharya Vagbhata mentions that one should daily take up the snehana of shira, pada and karna. (A. H. 2/9). Acharya Sushruta has mentioned that snehana should be done in hanu, manya, shira, and karna shula daily. (Su. Chi. 24/29). Indulging daily in karnapurana can prevent vataroga of karna including karnashula, karnanada, badhirya etc.

### Samanya Chikitsa

Acharya Sushruta mentions general line of treatment for karna roga. It comprises ghrita pana, rasayana sevana, not to do excessive work, take bath except head, not to indulge in intercourse, not to talk excessively (Su. Ut. 21/3). With the administration of snehana dravyas, the vata is eliminated & mridutva in the body is produced. This finally results in the removal of mala sanga. The vitiated doshas, which obstructs the strotas,

are eliminated with the help of snehana (Ch. Si. 1/7). The administration of snehana is of two types. One is external & other is internal. Karnapurana come under the external snehana. (Su. Su. 31/3).

**Ghrita pana:** Administration of Ghrita pana sneha is grouped under the heading - 'Internal snehana'. Sneha is mainly of four types i.e. Ghrita, Taila, Vasa & Majja. Of all the above types of sneha, Ghrita has been considered as the superior. In all type of karna rogas ghrita pana is indicated according to Ayurvedic classics.

### Vishesha Chikitsa

Acharya Sushruta has mentioned some procedures in the particular treatment of karnasrava is given below

1. **Shirovirechana:** A type of Nasya procedure to evacuate the vitiated doshas out of shirah (the head) is known as 'shirovirechana'. The churna of Apamarga beeja, Katphala, Maricha, Nakachhikani etc. are mentioned for shirovirechana as shirovirechana dravyas in classical texts.
2. **Dhupana:** Dhupana is mentioned for vrana shodhana, vrana ropana & to relieve from bad odour. In this process, specific dhupana dravya is kept on burning wood or charcoal and the fumes coming out of it is directed to the vrana sthana. Guggulu, Agaru, Sarja etc. Dhupana dravyas are mentioned for fumigation outside the ear & into the external auditory canal.
3. **Purana:** Literary meaning of purana is to fill up, to instil, to pore. Purana is the process of filling the swarasa, taila etc. into external auditory canal to relieve pain, discharge, itching etc.
4. **Pramarjana:** Pramarjana means to wipe, to clean, to rub out. It eliminates bad smell, cures heaviness, drowsiness, itching and remove undesirable dirt and unpleasantness due to sweating. (Ch. Su. 5/93).
5. **Dhavana:** Dhavana means washing and cleansing prakshalana is a synonym of Dhavana. Sushruta has mentioned Rajavrukshadigana and Surasadigana for karnaprakshalana.
6. **Avachurnana:** Avachurnana means spraying or sprinkling of fine powders to absorb the kleda. Secretion & to stop oozing. For the purpose fine powders of kashaya rasa - Astringent taste are preferred like samudrafen, manahshila, lodhra etc.

**Karnashrava in contemporary science Otorrhoea:** Otorrhoea is usually due to the diseases of the ear, but it may be due to a few other causes outside the ear.



**Aetiology:** (A) Causes in the Ear

(1) **External ear** (i) Furunculosis, acute otitis externa. (ii) Otomycosis. (iii) Viral otitis externa. (iv) Seborrhoeic otitis externa. (v) Eczematous otitis externa. (vi) Granulomas. (vii) Myringitis. (viii) Wax with secondary otitis externa. (ix) Tumours (rare): Ceruminoma, malignant tumours.

(2) **Middle ear**

1. Acute suppurative otitis media.
2. Chronic suppurative otitis media.
3. Tumours (rare).

(3) **Inner Ear**

(i) Suppurative Labyrinthitis may indirectly add to otorrhoea caused by otitis media, which is the primary cause of labyrinthitis.

**B) Causes outside the Ear** (i) Cerebrospinal fluid otorrhoea. (ii) Parotid abscess rupturing into the external auditory canal. (iii) Temporomandibular joint abscess rupturing into the external auditory canal.

**Features:** The ear discharge may be profuse or scanty, continuous or intermittent.

1. Serous discharge may be due to eczematous otitis externa.
2. Mucoid or mucopurulent discharge containing mucin is produced by the mucosa of the middle ear in patients having perforated ear drum.
3. Purulent discharge may come from the lesions of external ear, middle ear or an abscess affecting the parotid gland or temporomandibular joint.
4. Foul smelling discharge is often due to cholesteatoma.
5. Sanguineous discharge may be caused by a polyp, granulations, trauma or tumour.
6. Watery discharge is caused by cerebrospinal fluid otorrhoea.

**Investigations**

1. Otoscopy (examination of the ear).
2. Bacteriological examination of the discharge for smear, culture and antibiotic sensitivity.
3. Exfoliative cytology of the discharge, if malignancy is suspected.
4. Tests of hearing.
5. Radiological examination of the ear.
6. Biopsy.
7. Routine investigations for anaesthetic fitness.

**Management**

- (1) Specific treatment depends on the cause.
- (2) General management for otorrhoea is similar to the conservative treatment of chronic otitis media.
  - Ear drops: Antibiotic ear drops are not advised if there is fungal infection. Similarly, ear drops are not advised for cerebrospinal fluid otorrhoea, as the drops may enter the cranial cavity.
  - Systemic antibiotics are prescribed if necessary.

- Aural toilet: Water should be prevented from entering the ear.
- The discharge may be mopped by swab sticks. The ear may also be cleaned by suction.

**CONCLUSION**

Karnashrava is the disease of Karnaroga, it is well described by Acharya Sushruta. Karnashrava can compare with Otorrhoea. Avashyaya (Dew), Pratishtaya (Common cold), Jalakrida (water entry in the ear), Karnakanduyana, Mithyayogen shastrasya, Shirobhighata and Prapakat vidradhe are the main causes of Karnashrava. There are not any specific purvarupa of karnashrava. But increase of wax formation, itching sensation heaviness of the ear can be taken as purvarupa. (A. H. Su. 11/14). Acharya Madhavakara say, that Avyakta lakshana is the purvarupa of vyadhi. Nasya, Dhmapana, Karnapurana, Karna prakshalana and Karna Aschyotan are best modality to treat Karnashrava.