

A STUDY ON EFFECTIVENESS OF IRIMEDADI TAILA AND KHADIRADI VATI IN THE MANAGEMENT OF POST RADIATION COMPLICATION OF A HEAD AND NECK CANCER - A CASE STUDY

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ABSTRACT

Hypopharyngeal cancer is a highly malignant tumor of the head and neck that account for approximately 3%-5% of all head and neck malignancies. The pyriform sinus is a part of pharynx located in a posterolateral position in relation to larynx is the most frequently affected site and represents 70% of hypopharyngeal carcinoma. Ca pyriform sinus is a highly malignant disease usually with a generally poor prognosis. The treatment approach of Ca pyriform fossa includes radiation therapy can be used as a single modality or as part of a combined approach. Various adverse effects of radiation therapy are found that may be on acute onset, subacute, delayed onset which includes symptoms like dry mouth, soreness in the mouth or throat, trouble swallowing, swelling in gums, throat etc which can be correlate with Mukha rogas as mentioned in ayurveda. In Ayurveda Irimedadi

taila, Khadiradi Vati etc are mentioned in treatment of various mukha rogas. A 54 year old male patient suffering from ca right pyriform sinus was treated for his post radiation side effects in Govt Ayurvedic College & Hospital, Guwahati. After treatment for 3 months a significant clinical improvements was found as well as the quality of life was improved.

KEYWORDS- *Pyriform sinus, Mukha roga, Irimedadi taila, Khadiradi vati.*

INTRODUCTION

Hypopharyngeal cancer is a highly malignant tumor of the head and neck that account for approximately 3%-5% of all head and neck malignancies. The pyriform sinus is the most frequently affected site and represents 70% of hypopharyngeal carcinoma.^[1] Radiation

therapy (RT) is widely used to treat the Ca pyriform sinus whether with the intent to cure or for palliation along with post operative or with chemotherapy or it may be used alone. There are many adverse effects induced by radiation can be classified as true complication and can be divided into four groups on the basis of timing of onset. Acute (during treatment), sub acute (Within weeks to month), delayed onset (Within month to years) and very delayed onset (After several years).^[2] People who get radiation to the head and neck might have side effects such as dry mouth, trouble swallowing, soreness in the mouth or throat, swelling in gums, throat or neck, changes in taste, jaw stiffness etc.^[3] All these symptoms found after radiation can be taken together as mukha rogas according to Ayurveda. In Sushruta samhita 65 numbers of mukharogas are mentioned in different categories such as osha, dantamoola, danta, jihwa, talu, kantha and sarva mukha. Mukhapaka-ulceration of oral cavity, Alasaswelling on undersurface of tongue, Talupaka-ulceration of palate, Swaraghna-hoarseness of voice/loss of voice etc are described by Acharya Sushruta.^[4] Irimedadi taila which is used in mukha rogas shows immense effects in all mukha rogas.^[5] That of Khadiradi vati also plays an important role in treating mukha rogas.^[6] For all these serious adverse effects of radiation therapy, patients suffered a lot and their quality of life deteriorated. Patient doesn't get satisfactory result from conventional palliative methods and they search for alternative like Ayurveda. So, a palliative care for post radiation complication by Ayurveda is the need of the hour.

CASE PRESENTATION

A 54 year old male patient diagnosed with Ca right pyriform sinus undergone with 35 nos of radiation and 4 cycles of chemotherapy came from Khalikhola of Udalguri District of Assam attended cancer speciality OPD Govt Ayurvedic College & Hospital, Ghy on 22.09 2022. He complains of ulceration in the oral cavity, swelling of lips and tongue, dryness of mouth, difficulty in swallowing, throat irritation and hoarseness of voice for 3 months after radiation therapy. The patient was only on liquid diet. The patient had h/o-T2DM and Addiction h/o taking betelnut with tobacco for long period of 18-20 years. No family h/o any malignancy was found. On general examination his weight was 53kg, B.P-136/90mmhg, P/R-74bpm, R/R18/min, Temp-98.6°F. Pallor, clubbing, edema, cyanosis were absent. No palpable lymph nodes were found. O/E of oral cavity, ulceration was found in the buccal mucosa and floor of the mouth. Lips, tongue and the floor of mouth was edematous. On systemic examination no abnormality was detected. The quality of life was assessed by ECOG score and

KARNOFSKY performance score. ECOG score was found 3 and that of KARNOFSKY performance score was 70 after detailed questionnaires as per guidelines.

TREATMENT PROTOCOL

The patient was prescribed with Irimedadi taila and Khadiradi vati combinedly with appropriate dosage (Table no- 01). Irimedadi taila was advised for local application and Khadiradi vati to take orally. Also the patient was advised to be on vegetarian diet strictly and to avoid sweet, spicy, junk food etc. The patient continued his treatment with 3 regular follow up visit for 3 months. During the monthly visit the assessment of quality of the life was done by using ECOG and KARNOFSKY performance scale along with general and systemic examination.

OUTCOME

After taking Ayurvedic treatment for regular 3 months initial complaints of mouth ulcer, dryness of mouth, edema of tongue and lips, throat irritation, hoarseness of voice was improved. The ulcer of the mouth get reduced with every followup. The patient now could have solid food and started normal life. The quality of life get improved along with the improvement of ECOG score from 3 to 1 (Table no -2). That of KARNOFSKY performance score showed improvement from 70 to 90 (Table no -3). He was now able to carry the normal activity with very less symptoms of disease.

Table No. 1: Detail of Treatment.

Sl. No.	Name of the medicine	Dosage	Frequency	Route of administration
1	Irimedadi Taila	Q.S	3-4 times/day	Local application.
2	Khadiradi vati	1vati	QID/day	Orally to be chewed.

Table no. 2: ECOG Score.

Sl. No.	No. of visit	ECOG Score
1	1 st on 15-03-2023	3
2	2 nd on 04-05-2023	2
3	3 rd on 17-06-2023	1

Table no. 3: KARNOFSKY Performance Score.

Sl. No.	No. of visit	KARNOFSKY Status
1	1 st on 15-03-2023	70
2	2 nd on 04-05-2023	80
3	3 rd on 17-06-2023	90

DISCUSSION

The present case report shows palliative treatment in relation with mukha roga chikitsa in a case of Ca pyriform fossa. After radiation and chemo therapy the patient developed some symptoms which can be correlate with mukha rogas mentioned in Ayurveda. So mukha roga chikitsa treatment was given like Irimedadi taila and Khadiradi vati. Irimedadi taila^[7] contains drugs like manjistha, lodhra, yastimadhu, vita khadira, laksha, katphala, nyagrodha, musta, ela, karpura, aguru, candana, lavanga, jatiphala, tila taila etc. In Irimedadi taila majority of drugs are tikta, kasaya, madhura rasa yukta acts as sthambhaka so helps in curing bleeding gums and ulceration of mouth. Irimeda^[8] acts as sthambhaka, kusthaghna. Manjistha^[9] acts as varnya. That of Lodhra^[10] acts as sothahara, kapha pittahara helps in curing edematous lips / tongue. Nyagrodha^[11] with its kasaya rasa acts as vranahara, dahaghna etc. Musta^[12], Ela^[13], Karpura^[14], Candana^[15] helps to increase the appetite, acts as mukhagandhahara, kaphapittahara. Lavanga^[16] has tikta katu rasa acts as kaphapitta samaka, dhantapidahara, sulahara, that of Jatiphala^[17] acts as kanthya and mukhabairashahara. Tila^[18] taila is dantya, viryaprada etc.

In Irimeda taila^[19] Khadira acts as bactericidal, manjista acts as analgesic, anti-inflammatory, lavanga acts as analgesic, antigingivitis and Irimeda controlled bleeding gums.

Khadiradi vati^[20] has ingredients like Khadira, vitkhadira, candana, padmakesara, manjistha, dhataki, laksha, rasanjana, triphala, lodhra, lavanga, ela, gairika, karpura, samanga, vacha etc. Here Vitkhadira acts as antimicrobial and anti-inflammatory agent. Khadiradi vati^[21] increases the concentration of vitamin c in cells along with elimination of free radicals, also inhibits the collagen destruction. Also acts as antiseptic relieves symptoms of stomatitis ulcer. With all these actions it helps in relieving all the symptoms those are mentioned above in the case. As in whole Khadiradi vati and Irimedadi taila helps in relieving the symptoms of mukharoga with their anti-inflammatory, antiseptic, astringent properties.

CONCLUSION

Irimedadi taila and Khadiradi vati shows satisfactory result in the management of post radiation complications and improving the quality of life in a case of Ca Head and Neck.

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