

ROLE OF *LANGHANA* IN *AMAVATA* VIS-À-VIS RHEUMATOID ARTHRITISPooja S.*¹, Suma K. J.² and Sanjay Kumar M. D.³¹Assistant Professor, Department of Kayachikithsa JSS Ayurveda Medical College, Mysuru.²Assistant Professor, Department of PG studies in Panchakarma, JSS Ayurveda Medical College, Mysuru.³Associate Professor, Department of PG studies in Kayachikithsa, Government Ayurveda Medical College, Mysuru.

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ABSTRACT

Amavata is a pain predominating and movement restricting disease, it hampers the normal activities of the patient. *Amavata* pose a challenge to the physician owing to its chronicity, incurability, complications and morbidity. *Amavata* is a *rasadushita vikara* and is mainly due to the impairment of *jataragni* and *dhatwagni*, resulting in the production of *ama*. Such *ama* when gets associated with *vikruta vata* and gets located in *sandhis* it produces *shoola*(pain), *shotha*(swelling) and *sthabdata* (stiffness) of *sandhis* (joints).^[1] *Amavata* is having similarities with disease Rheumatoid arthritis explained in contemporary science. Many peoples in society are unaware about disease and its complications which is responsible for lifelong joint deformities. *Langhana* is one among the treatment principles described in *Chakradatta*.^[2] for the disease *Amavata*. Hence an effort is made to understand the effect *Langhana* as Fasting therapy in the present day scenario.

KEYWORDS: *Amavata*, Rheumatoid Arthritis, *Langhana*, Fasting therapy.

INTRODUCTION

Chakradatta has described the principles of treatment for the disease *Amavata*, which includes *Langhana*, *Swedana*, administration of *dravyas* having predominance of *tikta*, *katu rasa* and *deepana dravya prayoga*, *Virechana karma*, *Snehapana* and *Bastikarma*. The text specified *nirsoohabasti* in the form of *Kshara basti* and also advised to use *Saindhavayukta taila for Anuvasana basti*.^[3] Same line of treatment is mentioned in *Bhaishajya Ratnavali*,^[4] *Bhavaprakasha*,^[5] *Yogaratanakara*.^[6] and *Vangasena*.^[7]

Langhana In Amavata

- All types of *Langhana* are beneficial in *rasavaha srotovikara*,^[8] as *Amavata* being one among the *rasavaha srotovikara*.
- *Langhana chikitsa* is advised in *amashayottha vyadhis*.^[9]
- In *Amapradoshaja vikaras*, *apatarpana chikitsa* is indicated. *Langhana* is one of the *apatarpanavath chikitsa*.^[10]
- *Langhana chikitsa* pacifies *amajanya vikaras*.^[11,12]
- In *alpa dosha* vitiation, *langhana* in the form of *upavasa* is advised. In *madhyama dosha* vitiation, *langhana* and *pachana* is advised. In *prabhoota dosha* vitiation, *shodhana* for *prabhoota dosha nirharana* is advised.
- *Shodhana* should not be done until and unless *doshas* attain *niraamavastha*, for which *langhana* should be adopted first.^[12]

- *Langhana* in the form of *upavasa* is advised in cases of *amajanya vikaras*.^[13]

Understanding The Effect of *Langhana* in *Amavata*

- (i) As in starvation, food is not available for digestion, the *Agni* metabolises *sama doshas* of body resulting in *Deepana*, *Ruchikarana*, *Jwaraghna* properties and *Laghavata* of the *shareera*. *Ashtanga hridaya* also described – *Agni* always digests the food, but when *ahara* is not available then *Agni* digests the *Ama*.
- (ii) *Langhana* in addition, creates a hunger reflex in the patients, resulting in the enhanced production of internal-cortisosteroid, which provide relief through the reduction of the inflammation.
- *Ama* has its origin from *amashaya*. *Langhana* is indicated in *amashayottha vyadhis*. Thus *ama* which is present in *Amavata* can be pacified by *langhana*.
- *Langhana* is indicated in *samavata* condition and contraindicated in *kevala vata* conditions. In *Amavata*, there is a predominance of *vata* but it is in *sama avastha*. So, *Langhana* is indicated in *samavata* condition. But care has to be taken that, *sarva dehaja prasruta samadosha* should not be eliminated out by *shodhana karma*, until *ama* gets digested, otherwise it will destroy the *shareera* instead of *vyadhi*.
- For this purpose, *Langhana* in the form of *upavasa* or *laghu bhojana* along with *deepana*, *pachana*

dravya should be employed to increase *jatharagni* and to attain *amapachana*.

Discussion on Understanding The Role of fasting In Rheumatoid Arthritis.^[14]

- Activation of CD4⁺ T cell and further differentiation to Th1 and Th17 lineages are shown to be responsible for progression of RA. Thus, decreased T cell activation owing to 7–10 day fasting suggests a transient immunosuppression, thereby suppressing RA.
- A fasting of 7–10 days with partial nutrient intake decreases joint swelling and pain, erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP).
- The release of Leukotriene B4 LTB4 from neutrophils will markedly reduces after fasting for 7-10 days.
Leukotriene B4 (LTB4) is a pro-inflammatory mediator, involved in activation of neutrophils, eosinophils, and monocytes, production of pro-inflammatory cytokines, which further leads to tissue inflammation and neutrophil-mediated tissue damage.

During starvation, ketone bodies, including β -hydroxybutyrate (BHB), increase and serve as an alternate source of ATP in mammals. NLRP3 inflammasome regulates release of IL-18 and IL-1 β (pro-inflammatory cytokines) in macrophages and gets activated on receiving damage-associated molecular patterns. There will be inhibition of activation of NLRP3 inflammasomes by BHB in response to various NLRP3 activators. BHB also reduced NLRP3-mediated release of IL-1 β and IL-18 from human monocytes. Thus, the study concludes that starvation or ketogenic diets may play an anti-inflammatory role through inflammasome inhibition in BHB-mediated manner.

CONCLUSION

The disease *Amavata* explained in *Ayurvedic* classical texts is having close similarities in clinical presentation with the disease Rheumatoid Arthritis as explained in modern texts. *Ama* is the root cause for the manifestation of the disease *Amavata*, so it has to be tackled first. *Ama* has its origin from *amashaya*. *Langhana* is indicated in *amashayottha vyadhis*. Thus *ama* which is present in *Amavata* can be pacified by *langhana*. Therefore, the concept of *Langhana* in terms of Fasting therapy is very much essential in the management of *Amavata vis-à-vis* Rheumatoid Arthritis.

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