

EFFECT OF *PUNARNAVA MANDUR* AND *DADIMAVLEHA* IN HYPOTHYROIDISM INDUCED *RAKTALPATA*- A CASE STUDY**Dr. Siddhi Gumphekar^{1*}, Dr. Ravindra Dhimdime² and Dr. Milind Kirte³**¹PG Scholar, 2nd Year Kriya Sharir Department, GAC Osmanabad.²Head of Department, Kriya Sharir Department, GAC Osmanabad.³Associate Professor, Kriya Sharir Department, GAC Osmanabad.Article Received on
30 November 2022,Revised on 20 Dec. 2022,
Accepted on 11 Jan. 2023

DOI: 10.20959/wjpr20232-27001

Corresponding Author*Dr. Siddhi Gumphekar**PG Scholar, 2nd Year Kriya

Sharir Department, GAC

Osmanabad.

ABSTRACT

Thyroid gland does not produce enough thyroid hormone, called hypothyroidism. It is disorder of endocrine system. Modern management is not as much effective & preventive as compared to ayurvedic management. In text of ayurveda, there is no direct reference of hypothyroidism. While analysing signs & symptoms of patient to reach *dosha-dushya sammurchana* & *samprapti*, we note that there is involvement of all *srotas* but dominantly *Rasavaha srotas*. A single case study of patient 52 years old female newly diagnosed with hypothyroidism presenting symptoms weight gain, stress, *raktalpata*, swelling over face since 3 months and presented in the outpatient

department with major complaints of anaemia i.e. very low Hb levels 7.0gm% on 02/08.2022 undergoing modern treatment of hypothyroidism and after treatment on 01/09/2022 her hb levels are 9.80gm%. Hence ayurvedic drug of choice is more useful and best treatment for *raktalpata* induced by hypothyroidism.

KEYWORDS: *Raktalpata*, *Punarnava mandur*, *Dadimavaleha*, Hypothyroidism, *Pandu*.**1. INTRODUCTION**

Hypothyroidism is now became lifestyle disorder & very common in today's world. The prevalence of hypothyroidism in India is 10.95%.^[1] The global incidence of disease is also increasing. Weight gain, fatigue, puffiness of face are common symptoms seen today.^[2]

In ayurveda according to signs & symptoms we seen in hypothyroidism are.

Sr. No.	Lakshana	Ayurvedic term	Dosha	Guna
1	Weight gain	<i>Shotha, Kleda</i>	<i>Kapha</i>	<i>Sthula</i>
2	Low appetite	<i>Kshudha-mandya</i>	<i>Kapha, Vata</i>	<i>Sheeta, Guru</i>
3	Tiredness	<i>Daurbalya</i>	<i>Vata</i>	<i>Ruksha</i>
4	Body ache	<i>Angamarda</i>	<i>Vata</i>	<i>Chala, Ruksha</i>
5	Laziness	<i>Alasya</i>	<i>Kapha</i>	<i>Manda</i>
6	Palor	<i>Raktalpata</i>	<i>Kapha</i>	

So according to overall *lakshanas* there is *vata-kapha dosha prakopa*. And with ‘*anshansh kalpana*’ – *vata* is increasing by its *ruksha, chala, sheeta guna*. And *kapha* is increasing by its *sheeta, guru, manda guna*.

We can get the *samprapti* as *raktalpata* is seen due to *rasavah srotas dushti*. Due to *vata-kapha dosha prakopa*, there is *srotorodha* and *aam utpatti* seen. And so the *rasadhatwagni mandya* & eventually *rasavah srotas dushti* seen.

Here it indicates the involvement of *vata-kapha dosha, rasa dhatu & rasa dhatwagni*.

2. CASE DESCRIPTIONS

A 56 years old female newly dignosed with hypothyroidism presenting with anaemia, weight gain, irregular menstrual cycle, swelling over face, excessive sleep, stress since 3 months and presented in out patient department.

ASHTAVIDH PARIKSHAN

Nadi (pulse):- 82/min. *Manda nadi, Hansa gati*.

Mala (stool):- Irregularity in bowel movements

Mutra (Urine):- Normal

Jeeva (tongue):- Saam

Shabda (speech):- Alpa kshin

Sparsh (skin):- *Ruksha*

Druk (eyes):- *Alpa pitvarni*

Akruti:- *Sthula*

3. AIM

To assess the effect of *Punarnava mandur & Dadimavleha* combination in management of *raktalpata* induced by hypothyroidism.

4. OBJECTIVES

Evaluated the effect of *Punarnava mandur*, *dadimavaleha* in *raktalpata lakshana* induced by hypothyroidism.

5. MATERIALS AND METHODS

5.1 MATERIALS

Sr.No.	Dravya	Dose	Duration	Anupana
1	<i>Punarnava Mandur</i>	500mg	After food	Warm water
2	<i>Dadimavaleha</i>	15ml	After food	

5.2 METHODS

Single case study of patient presenting severe *raktalpata* with hyperthyroidism was selected from out patient department of GAC Osmanabad. Informed consent was taken from patient.

6. DIAGNOSIS

According to ayurveda patient clearly shows symptoms as *rasa dhatu dushti lakshana* & *kapha dosha*. So it was case of *pandu* as patient came with reports of Hb, T3, T4, TSH levels with Hb = 7.00gm%.

7. OBSERVATION AND RESULT

The patient was administered classical internal medication. There is no allopathic treatment going on only *Punarnava mandur* & *Dadimavleha* combination for *raktalpata* given to patient.

After starting *Punarnava mandur* & *Dadimavleha* orally her symptoms like fatigue, swelling over face, weakness are started to reduce over course of time. In between medications her condition started to improve. On 02/08/2022 patient's Hb level was 7.00gm% and after 1 month on 01/09/2022 Hb level raised, became 9.80gm%. Significant result observed in subjective and objective criteria.

8. DISCUSSION

There is no direct reference of hypothyroidism in ayurveda text. So according to signs & symptoms the dosha-dushya vikriti is Vata Kapha dosha prakopa and as per 'tar-tam bhava' there is Vata-vruddha- Kaphamandya- Pitta ksheen awastha.

Hence according to vata kaphaj disorder and raktalpata, treatment was given to patient. Ayurveda provides promising treatment for the disease. Also, pathya apathya management is important.

- Pathya:- Ahar- Light diet, Dates, Nachani satwa/bhakri, Shingada flour, Rajgira ladoo, Dadima juice advised.

Vihar- Mild exercise- walking for 20 minutes, Ujjayi Pranayama.

- Apathya:- Heavy fried fast food, Day sleep.

9. MODE OF ACTION

9.1 Internal medicine

1) **Punarnava Mandur:-** Reference (Charak Chikitsa 16/93-95).

Ingredients	Latin name	Proportion
Punarnava	<i>Boerhaavia diffusa</i> Linn.	1 part
Trivrita	<i>Operculina turpethum</i> Linn.	1 part
Shunthi	<i>Zingiber officinale</i> Rosc.	1 part
Maricha	<i>Piper nigrum</i> Linn.	1 part
Pippali	<i>Piper longum</i> Linn.	2 parts
Vidanga	<i>Embalia robusta</i> C. B. Clarke	1 part
Devdaru	<i>Cedrus deodara</i> (Roxb.)	1 part
Kushtha	<i>Saussurea lappa</i> C.B. Clarke	1 part
Haridra	<i>Curcuma longa</i> Linn.	1 part
Daruharidra	<i>Berberis aristata</i> DC.	1 part
Amalaki	<i>Embalica officinalis</i> Gaertn.	1 part
Bibhitaki	<i>Terminalia bellirica</i> Roxb.	1 part
Haritakai	<i>Terminalia chebula</i> Retz.	1 part
Danti	<i>Baliospermum montanum</i> (Willd.)	1 part
Chavya	<i>Piper chaba</i> Hunter.	1 part
Indrayava	<i>Holarrhena antidysenterica</i> (Roxb. ex Flem.) Wall.	1 part
Pippalimula	Root of <i>Piper longum</i> Linn.	1 part
Musta	<i>Cyperus rotundus</i> Linn.	1 part
Chitraka	<i>Plumbago zeylanica</i> Linn.	1 part
Mandura	Incinerated red oxide of iron	40 parts
Bhasma		
Gomutra	Cow's urine	Q.S. [3]

On looking at the ingredients of Punarnava Mandura,^[4] [Table 1], it may work in above context by its effect on Srotasa (micro channels) and Agni (digestive fire mechanism) by enhancing digestive capacity as a result of their Deepana (appetizer), Pachana (digestive) properties. Hence, thereby curing the disease (Pandu) and promoting immunity of the body.

Mandura Bhasma (incinerate form of iron-Fe₂O₃), the main component is the activator of the formulation and is the chief responsible component for the pharmacodynamics of Punarnava Mandura. By virtue of Rasa and Guna it pacifies aggravated Pitta and maintains the normalcy, improves the digestion and metabolism. Looking in to the diversified actions, Acharya Charaka says that, Mandura and its preparations are vital in treating cases of Pandu. The ferric and ferrous fractions of Mandura provide sufficient amount of iron to the living matter, which is needed for normal erythropoiesis.^[5]

As Gomutra (Cow's urine) is one ingredient of Punarnava Mandura, it works as Rasayana by its antioxidant property. It has been found to be a very good immune enhancer.^[6] Presence of erythropoietin hormone in Cow's urine may be one of the reasons why Gomutra is useful in anemia. Iron present in Cow's urine maintains balance and helps in production of red blood cells and Hb.^[7]

According to Ayurvedic literature, most of the drugs in Punarnava Mandura that is Triphala,^[8] Trikatu,^[9] Chitraka,^[10] Vidanga,^[11] and Pippalimula^[12] are having appetizer, digestive and carminative properties. Hence it improves digestive power and ultimately absorption of nutrition and drug also. The components like Trivrita,^[13] Haritaki^[14] and Danti^[15] act as purgative/laxative which help in relieving constipation mainly found in old age. Haridra,^[16] Amalaki,^[17] Pippali,^[18] Punarnava^[19] and Trivrita^[20] are thought to be Panduhara by various Acharyas. Other drugs that is Amalaki, Danti, Pippali, Punarnava, Kushtha and Daruharidra are documented as drugs which are having immunomodulator and antioxidant properties. Hence, they may have the potential to confer beneficial health effects due to their antioxidant activity and thus useful in anemia.

Amalaki possess antioxidant activity and could be an important dietary source of Vitamin C, which is a powerful water-soluble antioxidant and helps in increasing iron absorption from the gut.^[21] One study on Pippali suggests that, piperine gets absorbed very quickly across the intestinal barrier through the intracellular pathway. It may modulate membrane dynamics due to its easy partitioning thus helping in efficient permeability across the barriers.^[22] In addition Pippali is said to be bio-availability enhancer of the drug,^[23] which further helps in easy assimilation of the drug components. Hence, it counteracts poor digestion and absorption usually reported in patients of anemia. It has also immunomodulator activity. Therefore it improves general health and immunity vigor, luster of the skin etc., in patients having anemia.

Dose:- 2 tablets (500mg) after food BD.

2) Dadimavaleha:- Dadimadi ghruta reference (Charak Chikitsa 16)

- Tejpatra :- Cinnamomum tamala
- Aardrak :-Zingiber officinale
- Dadim :- Punica granatum
- Jatiphal :- Myristica fragrance
- Miri :- Piper nigrum
- Dalchini :- Cinnamomum zeylanicum
- Sugar

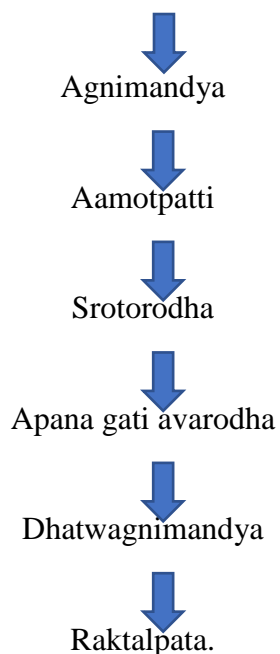
It is the formulation which has dadima as main ingredient which can act in raktalpata. Overall formulation acts on agnimandya, aruchi, raktalpata as in rasavah srotas dushti lakshanas.

Dose:- 15ml after food BD.

SAMPRAPTI

Probable mode of samprapti & samprapti bhanga

Santarpanjanya Hetu Sevan



10. CONCLUSION

Panduta can be very well managed by ayurvedic principles depending upon the severity. In case of hypothyroidism, it should be ruled out at opd level as its most prevalent disorder. We

not only can manage or normalize the level but can correct them. No side effects or any complications were seen, because patient very well tolerated the treatment.

Ayurvedic medicine are requested to prescribe without any fear because it is showing its worthiness. Thus such condition can be managed effectively with the help of ayurvedic principles.

Sex	: - Female		
Date	: - 02/08/2022		
Ref By Dr	: -		

HAEMOGRAM			
Haemoglobin	: - 7.00	gm %	MALE : 12 – 15 FEMALE : 10 – 12
RBC Count	: - 3.41	millions /cu mm	3.5 – 5.5
WBC Count	: - 12,000	Cells /cu mm	4000 – 11000
Platelet Count	: - 2.95	Lac /cu mm	1.5 – 4.5
DIFFERENTIAL COUNT			
Neutrophils	: - 74	%	40 – 70
Lymphocytes	: - 22	%	20 – 40
Eosinophils	: - 02	%	01 – 06
Monocytes	: - 01	%	02 – 08
Basophils	: - 00	%	00 – 01
Blood For Malarial Parasites : - Not Detected			
WIDAL TEST			
S. Typhi "O"	: - Negative		
S. Typhi "H"	: - Negative		
S. Paratyphi A (H)	: - Negative		
S. Paratyphi B (H)	: - Negative		

Medical Lab Technical Analysis Result Sheet			
Patients Name	: -		
Sex	: - Female	Age : - 53 Yrs.	
Date	: - 01/09/2022		

HAEMOGRAM			
Haemoglobin	: - 9.80	gm %	Female : 10 – 12 Male : 12 – 14.5
RBC Count	: - 4.19	millions / cu mm	4.0 – 5.5
WBC Count	: - 8,800	Cells / cu mm	4000 – 11000
Platelet Count	: - 3.04	Lac / cu mm	1.5 – 4.0
DIFFERENTIAL COUNT			
Neutrophils	: - 54	%	40 – 70
Lymphocytes	: - 40	%	20 – 40
Eosinophils	: - 02	%	01 – 06
Monocytes	: - 04	%	02 – 08
Basophils	: - 00	%	00 – 01
on 01/09/2022			

REFERENCES

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3743364/>
2. Davidson's Edited by Edwards, Bouchier, Haslett, Principle and Practice of medicine Churchill Livingstone, 17th edition, 1995; Page no-685.
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4649575/>.
4. Vaidya Jadavji Tirkamji Acharya., editor. 2nd ed. Varanasi: Chaukhamba Surbharati Prakashana; 2005. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Chikitsa Sthana, Pandurogachikitsa Adhyaya, 16/93-96. 530. [Google Scholar]
5. Baghel MS, Prajapati PK, Ravishankar B, Patgiri BJ, Shukla VJ. Jamnagar: India, Institute for Post Graduate Teaching and Research in Ayurveda, Gujarat Ayurved University, 2009. Galib, Monograph on Punarnava Mandura (SMP and Safety Profile) p. 7. [Google Scholar]
6. Banga RK, Singhal LK, Chauhan RS. Cow urine and immunomodulation: An update on cowpathy. Int J Cow Sci, 2005; 1(2): 26–9. [Google Scholar]
7. Available from: <http://www.goshala.com/Articles/2011/Jun/Urinebenefits.html>.

8. Mishra BS, editor. 7th ed. Varanasi: Chaukhambha Sanskrita Bhavan; 1990. Bhavamishra, Bhavaprakash Nighantu, Purvardha, Haritakyadi Varga, 1/42-32. 12. [Google Scholar]
9. Ibidem. Bhavaprakasha Nighantu, Haritakyadi Varga, 1/63. 19. [Google Scholar]
10. Ibidem. Bhavaprakasha Nighantu, Haritakyadi Varga, 1/70. 19. [Google Scholar]
11. Ibidem. Bhavaprakasha Nighantu, Haritakyadi Varga, 1/12. 52. [Google Scholar]
12. Ibidem. Bhavaprakasha Nighantu, Haritakyadi Varga, 1/64. 19. [Google Scholar]
13. Kohli KR, Nipanikar SU, Kadbhane KP. A comprehensive review on Trivrit [*Operculina turpethum* Syn. *Ipomoea turpethum*] *Int J Pharma Bio Sci*, 2010; 1: 443–52. [Google Scholar]
14. Malhotra S, Pal Singh A. A review of pharmacology of phytochemicals from Indian medicinal plants. *Internet J Altern Med*, 2007; 5(1): 4. [Google Scholar]
15. Joy PP, Thomas J, Samuel M, Skaria BP. Vol. 1. Thrissur: Kerala Agricultural University, Aromatic and Medicinal Plants Research Station, 1998. Medicinal Plants; p. 114. [Google Scholar]
16. Mishra B S, editor. 7th ed. Varanasi: Chaukhambha Sanskrita Bhavan; 1990. Bhavamishra, Bhavaprakash Nighantu, Purvardha, Haritakyadi Varga, 1/197. 114. [Google Scholar]
17. Ibidem. Bhavaprakasha, Haritakyadi Varga, 1/39. 10. [Google Scholar].
18. Ibidem. Bhavaprakasha, Haritakyadi Varga, 1/58. 15. [Google Scholar].
19. Ibidem. Bhavaprakasha, Guduchyadi Varga, 1/231. 422. [Google Scholar].
20. Kaiyadeva Nighantu. *Aaushadhi Varga*/1016. In: Sharma P, Sharma GP, editors. 1st ed. Varanasi: Chaukhambha Orientalia, 2006; 188. [Google Scholar]
21. Mohan H. 5th ed. New Delhi: Jaypee Brothers, Medical Publishers; 2005. Text Book of Pathology, 369. [Google Scholar]
22. Khajuria A, Zutshi U, Bedi KL. Permeability characteristics of piperine on oral absorption – An active alkaloid from peppers and a bioavailability enhancer. *Indian J Exp Biol*, 1998; 36: 46–50. [PubMed] [Google Scholar]
23. Shoba G, Joy D, Joseph T, Majeed M, Rajendran R, Srinivas PS. Influence of piperine on the pharmacokinetics of curcumin in animals and human volunteers. *Planta Med*. 1998; 64: 353–6. [PubMed] [Google Scholar]