

AYURVEDIC APPROACH FOR THE MANAGEMENT OF INTERSTITIAL LUNG DISEASE - A CASE REPORT

Chaudhary Shikha^{1*}, Rani Jyoti², Agrawal V. D.³ and Yadava R.K.⁴

^{1,2}PG Scholar, ³Professor, ⁴Associate Professor

Department of Kayachikitsa, All India Institute of Ayurveda, New Delhi.

Article Received on
17 July 2019,

Revised on 06 August 2019,
Accepted on 27 August 2019,

DOI: 10.20959/wjpr201910-15769

*Corresponding Author

Dr. Chaudhary Shikha

PG. Scholar, Department of
Kayachikitsa, All India
Institute of Ayurveda, New
Delhi.

ABSTRACT

Interstitial Lung Diseases(ILD) are a group of diffuse parenchymal lung disorders, most of which causes progressive scarring of lung tissue associated with substantial morbidity and mortality as the scarring in ILD eventually affects the ability to breathe and get enough oxygen into one's blood- stream. Prolonged ILD may result in pulmonary fibrosis. As there is no definite treatment for the disease, it has remained a great problem for the patients. Several conventional treatment modalities are in existence but not much comprehensive. Though the permanent cure for the disease is not available but Ayurveda can provide cost-effective and conveniently the better

treatment which relieves the symptoms to a good extent and improves the quality of life of the diseased. In this article, a case study presented on a case of ILD. A 55 years old female, diagnosed case of ILD, attended *Kayachikita* OPD (Outpatient Department), unit Respiratory disease at All India institute of *Ayurveda* with chief complaint of breathlessness since feb.2017. Patient got admitted in IPD (Indoor Pa- tient Department) ward and treated on the Ayurvedic principles. At the time of discharge, symp- tomatic relief was found in Breathlessness, and in ESR (Erythrocyte sedimentation Rate) but no significant changes in X- Ray Chest was observed after treatment.

KEYWORDS: Interstitial lung disease, *Ayurveda*, *Pippali Kalp Chikitsa*, *Rasayana*.

INTRODUCTION

Interstitial Lung Diseases (ILDs) represents a large number of conditions that involve the parenchyma of the lung - the alveoli, the alveolar epithelium, the capillary endothelium, and

the spaces between these structures, as well as the perivascular and lymphatic tissues.^[1]

There is no satisfactory treatment for interstitial fibrosis of the lungs. This progressive disease of unknown cause appears to be becoming increasingly common; perhaps chemical pollutants or viruses or moulds cause most cases.

Interstitial Lung Disease is considered as Auto-immune disorder where corticosteroids, immunosuppressants and symptomatic therapy suggested for management and in worse cases continuous oxygen inhalation therapy and ventilator intervention is required. Lung transplantation in later stages which is inconvenient and costly treatment not only to the patients but also lead burden to the family. The survival rate is very low and the cases have a short span of life. The drug hazards and cost of hospitalisation is another frustrating factor for middle class and poor patients.

In our clinical practice, we have found that the Ayurvedic intervention in ILD may improve the condition of patients and their quality of life get better with Ayurvedic medications. Here in this article, presenting the case study on ILD and emphasise on the intervention found to be useful in the cases of ILD.

Aim

- To assess the efficacy of Ayurvedic regimes in the management of ILD.

OBJECTIVES

- To identify the therapy and compile the regimes having potential effect on the ILD.
- To establish the adverse effect(s) of the regimen if any.

Case Presentation

A 55 years old Indian, married, non-smoking, non-alcoholic female patient consulted in Out-patient Department of *Kayachikitsa* at All India Institute of Ayurveda, New Delhi for a chief complaint of breathlessness since feb. 2017 and also complaining of on/off joint pain since 2 years as on 15.11.18.

Source of History: Patient.

History of Present Illness: The patient was apparently asymptomatic before 20 months. Then she developed breathlessness on walking and took allopathic medicine from her family

physician. She mentioned having on/off breathlessness and weakness afterwards for which she used to take medicine on/off. Then on 6.7.18, patient had severe breathlessness and cough for 3 days. On 9.7.18, she admitted in Moolchand hospital and diagnosed as a case of Interstitial Pneumonitis with type I Respiratory failure and treated accordingly and discharged on 5.8.18. She was taking medicines but not getting satisfactory relief and referred to Metro hospital in Delhi, diagnosed for Interstitial Lung Disease, possibility of non-specific interstitial pneumonia sub-acute hypersensitivity pneumonia in March 2017. The patient was on corticosteroids and broncho-dilator inhalers, immunosuppressant drugs for 1 years.

Past History : H/O Cholecystectomy in 1999

H/O Pulmonary TB 8 years back(took ATT for 9 months) K/C/O Osteoarthritis Both Knee 1.5 years.

Examination of Patient

<u>General Physical Examination</u>	<u>Personal History</u>	<u>Ashtavidha pariksha</u>	<u>Dashvidha Parikshaa</u>	<u>Systemic Examination</u>
<ul style="list-style-type: none"> • Patient built was medium • Temperature - 98.9⁰F • Weight - 50 kg • Height - 152 cm • BMI - 21.64 kg/m² • B.P. - 110/76 mm Hg • Pulse rate - 80/min 	Appetite - Good Type of diet - Mixed Bowel - Regular (1-2 times a day) Micturition - Sleep - Good Habits - Tea (3-4 times in a day)	80 bpm, reg. Vatapatik Mala- Normal Mutra- Normal Jihva- Coated Sparsh- Normal Drika- Normal Akriti- Medium	Prakriti - VP Vikriti - KV Saara - Madhyama Samhanana - Madhyama Pramaana - Madhyama Satmya - Madhyama Satva - Madhyama Aahara shakti - Madhyama Vyayama shakti - Avara Vaya - Pravara	CVS - NAD CNS - NAD Respiratory - B/L crepts present(Rt.>Lt.) GIT - NAD Urogenital - NAD

Investigations

HRCT thorax(8.11.18)- Subpleural areas of inter and interlobular septal thickening, honeycombing, macro cysts with patchy ground glass haziness in both lungs s/o ILD with UIP pattern. Also, multiple calcified foci in B/L upper lobes s/o calcified granulomas.

Chest X-Ray(17.11.18)- Fibronodular Opacities in Both lungs(Lt.>Rt.) s/o Pneumonitis

Patient was on following medicines at the Time of admission :-

1. Tab. Pefinix 200 mg thrice a daily
2. Inhaler Duolin four times a day
3. Nebulisation with foracort twice daily

Treatment Adopted

S.No	Treatment	Duration
1	Samshamana aushadi	10 days
2	Pippali Kalp Chikitsa	29 days
3	Rasayana	1 month

Oral medications*

- Abhrak bhasma 1 mg
Sameerpannaga Rasa 100 mg
Mallasinddor 100 mg
Sitopaladi churna 500 mg
1*2 Empty stomach with Honey twice a day
- Shirishadi kwath 20 ml Twice a day Empty Stomach
- Kanakasava 10 ml with equal quantity of water After food
- Dashmoola Haritaki avleha 5 gm Thrice a day with Lukewarm water
- Panchaguna taila For Local application Q.S.

* along with Nebulisation with Duolin SOS

After getting symptomatic relief, *samshana aushadhi* were stopped and patient kept on *pippali kalp chikitsa*.

Table 1: Pippali Kalp Chikitsa* given to the patient

Day	Quantity Of Pippali Churna	Day	Quantity	Anupana
1	1 gm	16	14 gm	Honey(Q.S.)
2	2 gm	17	13 gm	
3	3 gm	18	12 gm	
4	4 gm	19	11 gm	
5	5 gm	20	10 gm	
6	6 gm	21	9 gm	
7	7 gm	22	8 gm	
8	8 gm	23	7 gm	
9	9 gm	24	6 gm	
10	10 gm	25	5 gm	
11	11 gm	26	4 gm	
12	12 gm	27	3 gm	
13	13 gm	28	2 gm	
14	14 gm	29	1 gm	
15	15 gm			

* Only milk diet.

Criteria for assessment

The patient was assessed on the basis of subjective parameters i.e. MRC scale of breathlessness^[6], use of inhalers and objective parameter i.e difference in haematological and radiological reports before and after the treatment.

RESULT AND OBSERVATIONS

There was a satisfactory improvement found in the general condition of the patient after the treatment. Use of Inhalers was stopped completely at the time of discharge after Kalp chikitsa. Before treatment there was B/L knee joint pain which was reduced after *shaman aushadhi*. In objective criteria, ESR reduced from 26 mm/hr to 15 mm/hr but there were no significant changes found in the X-ray chest before and after the treatment.

The MRC scale of breathlessness [Table 2] reduced and duration of attacks of breathlessness also reduced.[Table 3].

Thus, the proposed therapy could be the effective therapy in managing the case of ILD.

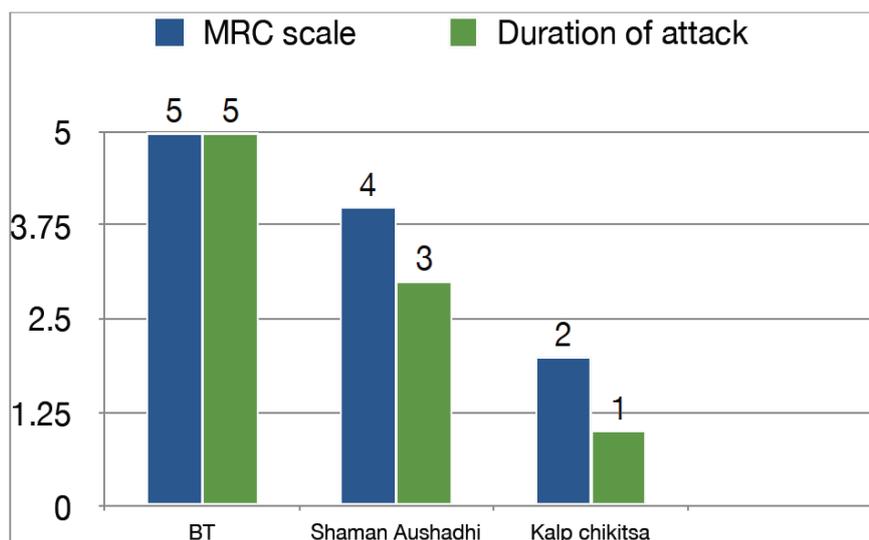
Table 2: The MRC Breathlessness Scale or Medical Research Council Scale for Breathlessness.

Grades	Degree of breathlessness related to activities
1	Not troubled by breathlessness except on strenuous exercise
2	Short of breath when hurrying on the level or walking up a slight hill
3	Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace
4	Stops for breath after walking about 100 yds or after a few minutes on level ground
5	Too breathless to leave the house, or breathless when undressing

Table 3: Gradation Pattern of Duration of attacks of breathlessness

Duration of Attack	Grade
No attack	0
Once in a month	1
Once in two week	2
Once a week	3
Twice a week	4
Everyday	5

Graphical Presentation Of Improvement



On the basis of clinically encouraging result found in the cases of ILD, the following protocol may be adopt for the management of ILD.

Line of Treatment: The proposed line of treatment in the case of ILD may be as follows-

Mridu Samshodhana

(*Sadyovamana, virechana*- only if the patient is eligible for the same)

↓

Samshamana aushadhi(If required-in case of severe symptoms)

↓

Pippali-varidhamana rasayana
(Decide time and amount after thorough *Rogi* and *Roga Pareeksha*)

↓

Rasayana therapy
(*Amrita bhallataka avleha, Chitrak Haritaki Avleha* etc.)

DISCUSSION

In the present case, *samshana aushadhi* were administered to the patient as she was not willing to undergo the *vamana*. The medicines used having marked symptomatic relief to the patient only after 3 days, the conventional medicine has been stopped next day because the patient was responding well to the medicine but nebulisation with Duolin was given whenever needed. When the condition of patient improved, the *kalp chikitsa* has been started.

After 29 days, on completion of *Kalp chikit- sa*, patient was discharged with advised of *Amrita Bhallataka Rasayana* 5 gm twice a day for a pe- riod of one month.

Pippali Kalp chikitsa refers to the use of *pippali* in increasing and tapering doses. *Pippali* mitigates *Ama*(endogenous waste material) which is responsible for autoimmune disorders in the body, result- ing in enhancement of immune system activities.^[2] *Pippali* has immune- modulatory^[3], rejuvenating property^[4], anti-asthmatic and anti-inflammatory property.^[5] *Pippali* is one of the best herbal *Sroto- shodhak* drug and in Interstitial Lung disease, there in nothing but the *dusti* of *Pranavaha srotas* which leads to *Pranavaha-sroto avrodh*. *Pippali* could be the potential remedy to remove the *avrodh* of *pranavaha srotas* as clinically the results were found to be highly encouraging.

After correcting the pathology based on Ayurvedic principle, to sustain the effect, the patient has been advised to take *Amrita-bhallataka avleha* for a period of one month. It may come under the *Kamyā rasayana*(used for improving specific quality in the body) which may help in Lung regener- ation which is the process of regrow, restore and renewal.

Benefits of *Rasayana* are many which as follows.

1. Nourishes and maintain the cell life (Nutritional action)
2. Encouraging the growth of new cells (Regenerative action)
3. Preventing recurrent infection (Immunomodulatory action) The patient was discharged and advised to come after 1 month. No adverse effects was noticed during intervention period.

CONCLUSION

The consorted approach of management explored and explained in this article with case illustration in which significant improvement was seen therefore this case was thought worth documenting. The described protocol may be an effective therapy in managing this dreadful disease. But also further preclinical and clinical studies are required to prove the efficacy of proposed treatment.

Source of Support

Nil.

Conflict of Interest

Nil

REFERENCES

1. Kasper, Braunwald et al. Harrison's Principles of Internal medicine, 16th Edition, part 9, section 2, P.1555.
2. Laveena Kumari et al. Effect of Pippali Vardhamana Rasayana in interstitial Lung Disease-A case Report, International Ayurvedic Medical Journal, ISSN:2320 5091, May 2017; 5(5).
3. Tripathi DM, Gupta N, Lakshmi V, Saxena KC, Agrawal AK. Antigiardial and immunostimulatory effect of Piper longum giardiasis due to Giardia lamblia. *Phytother Res*, 1999; 13: 561–5.
4. Acharya YT, editor, Agnivesha, Charak, Dradabala, Charaka samhita, Chikitsa sthana, Chapter 1 part 3, verse 40, edition, 2009, Choukhambha orientalia, 40.
5. Kumar S, Arya P, Mukherjee C, Singh BK, Singh N, Parmar VS, et al. Novel aromatic ester from Piper longum and its analogues inhibit expression of cell adhesion molecules on endothelial cells. *Biochemistry*, 2005; 6; 44: 15944; 52.
6. Fletcher CM, The clinical diagnosis of pulmonary emphysema- an experimental study, *Poc R Soc Med*, 1952; 45: 577-584.