

**Study the Effect of Shatavari Ksheerpak in Patients of Pulmonary Tuberculosis****Dr. Sana Abdul Raheman Shaikh**

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Guide

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**Introduction:**

Among the various diseases in Ayurveda, Pulmonary TB can be correlated with Ekadashroop Rajyakshma. It involves tridoshadushti, saptadhatukshaya, Jatharagnimandya, Balahani saptadhatvagnimandya. It has four main causative factors which give rise to four different samprapti.

According to 2014 World Health Organization statistics estimated prevalence for TB is 2.5 million in India alone and throughout globe 9 million causes are reported. It is estimated that 40% of India's population is affected with TB.

In Maharashtra Pulmonary tuberculosis is most common infectious disease seeking attention of public health department Low ventilated accommodation, low nutritious diet, high smoking rate, alcoholic indulgence, excessive physical work, lifestyle changes are certain factors causing TB. As TB primarily affects young and hard working group of society it will finally affect economy and development of our nation, which is why we have selected pulmonary TB for this research work.

Ayurvedic text says that there is diminished production of "Oja which leads to Balhaani in Rajyakshma; hence treatment should be Oja restoration and Bruhanchikitsa as per Ayurveda. No of drugs has been prescribed in Ayurvedic literature for the management of Rajyakshma and one among them is Shatavari Ksheerpak'. Acharya Sushrut has mentioned this drug is management of Rajyakshma is sushurtuttarsthanamadyaya. Main content of drug are Shatavarichoorn and cow milk.

It is well known fact that Shatavari is one of the best drug in Rajyakshma and it also possesses BalyaRasayan, Kshayapaha properties which ultimately results in better nourishment of aptadhatu. Shatavari and cow milk are well known

agents for their Brihana property. Hence ShatavariKsheerpak" has Rasayana and brihana drug for treatment of has been selected as pulmonary Tuberculosis (Rajyakshma).

**Aim:**

Study the Effect of ShatavariKsheerpak in Patients of Pulmonary Tuberculosis

**Objectives:**

- 1) Study the clinical and pathological improvement along with this adjuvant therapy.
- 2) To increase success rate and decrease failure and relapse rate of pulmonary tuberculosis.

**Shatavari:**

The roots emit horse's smell, promotes sexual potency, strength and complexion.

Botanical Name –Asparagus racemosus

Family- Asparagaceae

Cause effect relationship- Karyadravya

Living - Non Living- ChetanaDravya

Constitution -Vayu, Puthvi, Akash,

Origin-Audbhida

Usage – Aushadha Dravya

Morphology - Kshupa

Life Span -Bahuvrashayu

Rasa- Madhura, Tikta

Vipaka- Madhura

Veerya- Sheeta

Action on Dosha- Balances Vata and Pitta

Karma -Balya, Bruhana, Shukrala, Rasayana, Vataha

**Goksheer:**

Rasa : Madhura

Vipaka : Madhura

Guna: Mnudu, Snigdha, Bahala, Shlakshna, Guru,

Pichila, Manda Anabhishtandi

Doshagnata: VatapittaShamak

Veerya:Sheeta

Patients Dose -Shatavriksheerpak (80ml) early morning before breakfast.  
Duration of trial:-120 days.  
Follow up:-30h day, 60h day, 90h day and 120 day.  
Route of administration:-oral.

**Methodology**

A) Place of work: Primary Health Center  
B) Plan of work: Clinical trial was carried out on 40 patients of pulmonary tuberculosis in each group.  
Total-80 patients.  
GROUP A-40 Patients. (Only DOTS Therapy).  
GROUP B-40 Patients (Shatavriksheerpak with DOTS Therapy)  
1) Total 80 patients were selected in the study  
2) Prior consent was taken from each patient.  
3) Patients were selected on O.P.D. and I.P.D. basis.

**C) Selection of patients**

All patients of Tuberculosis were selected irrespective of religion, sex, economical status, education, occupation etc.

**Inclusion Criteria**

- 1) Sex: Male/Female
- 2) Age:20 to 60 Years
- 3)Patients of sputum positive Pulmonary Tuberculosis disease.
- 4) Sputum negative X-Ray positive for Koch's disease.
- 5) CAT 1 TB Positive

**Exclusion Criteria:**

- 1) Extra pulmonary Koch's
- 2) Multi drug resistance T. B
- 3) Pregnant women and Balrugna.
- 4) Psychologically disturbed (ill) patient
- 5) HIV patients with Koch's disease
- 6) CAT 2, CAT 3 TB Patients
- 7) Patient having hepatic toxicity, other complications
- 8) Patients having PTB along with Ascitis /CCF/DM/COPD

**Withdrawal Criteria:**

The patients will be withdrawn from the trial if,  
a) Occurrence of serious adverse events.  
b) The investigator feels that the protocol has been violated/patients has become in-cooperative

**Symptoms assessed were-**

**I) Subjective Parameters**

- Kasa (cough)
- Jwara (pyrexia)
- Atisara(Diarrhoea)
- Raktasthivan(haemoptesls)
- Shwash(Dysponea)
- Ansa Parshvashula
- KaphajVaman
- Shirshula (Headache)
- Swarbhed (Hoarsless)
- Aruchi (Loss of appetite)

**II) Objective Parameters**

- 1) Body weight in Kg- It was taken at every follow up visit.
- 2) Sputum for AFB- It was done visit I", visit 3rd, visit 5
- 3) Hb- It was done visit 1", visit 3rd, visit 5.
- 4) ESR- It was done visit 1", visit 3rd, visit 5
- 5) X-Ray chest- X-ray chest was recorded before and after treatment

**Observation:**

All the patients under the treatment were observed and the development& with regards to signs& symptoms has been compared, assessed & recorded.

**Overall Percentage of Relief**

SYMPTOMS	% Relief	
	Group-A	Group-B
<b>Kaas</b>	73.3	88.5
<b>Jwar</b>	52.2	48.3
<b>Ansparshawshool</b>	81	90.5
<b>Shwas</b>	79.6	90.4
<b>Shirshool</b>	72.1	83.6
<b>Raktshteevan</b>	82.4	92.5
<b>Swarbhed</b>	64.6	82.8
<b>Anastaap</b>	78.1	76.9

**Overall Effect**

	No. of symptoms	
	Group-A	Group-B
<b>No change (&lt;25 % )</b>	-	-
<b>Mild change (25 %-49.9% )</b>	-	2
<b>Moderate change (50% -74.9%)</b>	4	-
<b>Good change (75% + )</b>	7	9

**Conclusion :**

Treating patients of pulmonary tuberculosis cat-1 regimen along with Shatavariksheerpak shows:

- i) Significant reduction in overall symptoms of pulmonary tuberculosis because of its immunomodulatory and anti inflammatory response
- ii) Good tolerance of anti koch's drugs observed.
- iii) As it is hepatoprotective, reduction in side effects of antitubercular drugs such as Rifampicin, Isoniazid and Pyrazinamide, hence no darranged LFT's observed.
- iv) Sputum negativity in most of the patients (92% of trial group) observed, hence it is highly significant in treating pulmonary tuberculosis cat-1 regimen.

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