



# A Single Case Study Of Treating Pott's Spine Complication With Ayurvedic Medicines

Vd. Rewati A. Rakhunde<sup>1</sup>, Vd. P. S. Bhende<sup>2</sup>, Vd. G.H. Kodwani<sup>3</sup>

1. MD Scholar, Rognidan Dept, GAC, Nagpur.
2. Assistant Professor, Rognidan Dept., GAC, Nagpur.
3. HOD and Professor, Rognidan Dept., GAC, Nagpur.

## Abstract -

Treating a case of *Rajayakshama* i.e. Tuberculosis and getting results in it has always been challenging for most of Ayurvedic physicians. Among this, a physician encountering with a case of Pott's spine is a rare thing. Many of Ayurvedic formulations have been reported for their anti-tubercular activities but only a few are found to be significant in treating *Rajayakshama*. Moreover a specified treatment regimen has also been prescribed under National Tuberculosis Elimination program (NTEP). On other hand, in Ayurveda we get reference regarding *Rajayakshma* i.e. Pulmonary Tuberculosis and not regarding Extra pulmonary Tuberculosis and its complications, so making a specific treatment plan becomes difficult. Most common complication of Pott's spine is Kyphosis which results due to vertebral column deformity. This condition can be considered as *Udarka* and can be correlated with *Asthi dushti*. Conventional therapy used in this condition is unsatisfactory and is not free from side effects. A case of long standing Pott's spine with complications of kyphosis, restricted movements is presented here which was intervened successfully with Ayurvedic medications.

**Keywords** – *Aasthivaha strotas*, Kyphosis, Pott's spine, *Rajayakshama*, *Udarka*.

## Introduction

Ayurveda, one of the most oldest forms of holistic healing systems, has been curing people for thousands of years. The main aim of Ayurveda is 'Preservation of health of healthy person and treating ailments with breaking causative factors of pathogenesis.'<sup>[1]</sup> Many diseases which are said to be *Anukta* should be studied from Ayurvedic point of view under the umbrella of *Dosha*, *Dushya*, *Mala*, *Strotas* etc. One such disease is

Pott's spine which leads to kyphosis or vertebral column deformity. According to symptoms of patient, case was diagnosed as "*Kshayajanya Manya va Prushtagraha*". It is crucial to diagnose as Pott's spine may lead to serious conditions as Paraplegia etc. In which quality and span of life gets affected. Hence, patient is mostly advised a long Anti Koch's treatment (AKT) treatment or surgical Interventions. Ayurvedic therapies have shown promising results in relieving systemic symptoms and also vertebral deformities. In present case study, patient was treated for *Udarka* of Pott's spine i.e kyphosis with Ayurvedic treatment taking into consideration *Asthi dushti*. *Udarka* by some *tikakars* is considered as "*Uttarkalinphalam*" means signs of disease which remains after the disease has cured. After about treatment of 40 days, patient showed remarkable changes in kyphosis. Though patients are mostly advised surgical intervention, Ayurveda treatment can prove to be boon in such conditions. This is an Observational study of single patient and further study is necessary to establish role of Ayurvedic treatment in treating *udarka* of Pott's spine.

## **Material and Methods**

### **Case Report presenting concern**

A 34 years old patient diagnosed with Pott's spine presented in Outpatient Department (OPD) of Government Ayurved Hospital, Nagpur, Maharashtra (OPD Reg. NO. CR-16737) on dated 17-08-2022 with complaints of Cervical pain and stiffness, Lumbar pain and Stiffness, Shoulder pain and stiffness, difficulty in walking and loss of appetite and weight since last 2 years. Patients has received Anti Koch's treatment (AKT) treatment for 18 months.

### **Past history of disease**

Patient was diagnosed with Koch's of right knee joint with effusion at 10 years of age and took treatment for it for 1 year. Fibrosis took place leading to *Janu Sankocha* (knee deformity)

No H/O - HTN / DM / Bronchial Asthama.

No H/O - Pulmonary Tuberculosis

No H/O - Blood Transfusion

### **Investigations done at the time of admission**

**CBC** - Hb - 13.0 gm%, TLC - 3800/cumm, DLC - Polymorphs - 52%, Lymphocytes- 35%, Eosinophils + Monocytes - 13%. **ESR** - 6 mm at the end of 1 hr.

**Kidney Function test (KFT)**

Blood urea - 27.3 mg/dl

Sr. Creatinine - 1.18 mg/dl

Sr. Uric acid - 5.4 mg/dl

**Liver Function test (LFT)**

Total Bilirubin - 1.42 mg/dl

Direct Bilirubin - 0.60 mg/dl

**Lipid profile**

Cholesterol- 117 mg/dl

Triglycerides - 59.1 mg/dl

**X- RAY****Cervical spine - Lateral view-**

Complete fusion of C5-C6 vertebra which indicate Paradiscal type of presentation of Pott's spine.<sup>[2]</sup>

**Lumbar spine - Lateral view -**

Reduced space between L1-L2 vertebra indicating disease progression.

**Knee joint – Lateral view**

Fibrotic lesion suggesting healed extra tubercular lesion leading to fibrosis.



## MRI spine

MRI Cervical spine, plain study reveals bony ankylosis of C5-C6 vertebral body with destruction of intervening space without any soft tissue component consistency with post infectious sequence.

### Timeline of case

Events	Duration	Intervention	Disease condition
Koch's of Rt. Knee at age of 10 years.	1 year	Patient received AKT treatment for 1 year. Tapping was done.	Patient presented with swelling and pain in Rt. Knee joint with effusion. Symptoms got relieved but knee deformity occurred due to fibrosis.
Pott's spine (Cervical) 26-06-2022	Till date	Received AKT treatment for 18 months.	Patient presented with pain and stiffness in cervical region.

### Timeline of case in GACH, Nagpur

Date / Day	Intervention	Description of Condition
Day 1 (17-08-2022)	<i>Aabha guggul</i> 10 gms Tab. Calcipral 30 tabs <i>Kukkutandatwakbhasma</i> 10 gms <i>Aamalaki Rasayan</i> 50 gms Combined and distributed into 42 doses, given BD for 21 days. Tab. <i>Vatari guggul</i> 2BD <i>Prushthapradeshi snehan paschat swedana</i>	Due to <i>snehan</i> and <i>swedan</i> , spasm caused by paraspinal muscles was reduced which aided in relief from restricted movement
Day 11 (27-08-2022)	Above Interventions and <i>Prushthavanshadhara</i>	

Day 17 (02-09-2022)	Above Interventions and <i>Dakshin janu tailapattabandhan</i> was advised.	To improve gait which was hampered due to <i>Janu sankocha</i> which occurred due to fibrosis
Day 20 (05-09-2022)	<i>Panchatiktakshira basti</i> (Avg 120-150 ml daily)  Guduchi, Nimbachal, Patola, Kamtakari, Vasa)	Acts specifically on <i>Asthivaha strotas</i> .
Day 23 (08-09-2022)	Knee traction for 1/2 hr  <i>Ashwagnadharishta</i> 15ml BD  <i>Trayodashanga guggul</i> 2BD	Knee deformity reduced helping in proper walking.
Day 30 (15-09-2022)	<i>Yoga</i> and <i>Pranayama</i> was advised - <i>Drighaswashan</i> , <i>Bhramari</i> , <i>Bhastrika</i> , <i>Setubandhasan</i> , <i>Tadasan</i> , <i>Hastapadasan</i> .	Patient's posture was improved as kyphosis was reduced.
Day 40 (25-09-2022)	<i>Karmabasti</i> (12 Niruha and 18 Anuvasan basti)	Detoxification of accumulated <i>doshas</i> .
Day 42 (27-09-2022)	<i>Balapushti yoga</i> with <i>dugha</i> (1tps in morning) and <i>Lashunadi vati</i> 2BD	Advised for further weight gain.

## Discussion

Ayurvedic treatment of treating *Udarka* of Pott's spine involves principles of nutritional support measures, palliative care and detoxification therapy. Detoxification i.e. Panchakarma procedures include *snehana* (oleation), *swedana* (fomentation) and *basti* (emeis) has proved most effective in management of kyphosis. Main moto of this was to eliminate disease causing factors and preserve Immunity of patient. *Snehana* with *til taila* helps in *mardava* and is *kledakarak*<sup>[3]</sup>, and is considered as remedy of *Vataroga*.<sup>[4]</sup> *Swedan* (fomentation) reduces *stambha*, *gaurav* and *shita guna* leading to relief from restricted movements.<sup>[5]</sup> It also acts as analgesic, reduces inflammation and improves circulation. Patient was given *Panchatiktakshira basti* which acts on *asthi dhatu*.<sup>[6]</sup> The accumulated toxins materials which gets obstructed in *strotas* channels causing disease are expelled from body with the help of *basti* (emesis). For this purpose *shodhan basti* i.e *Karma basti* (12 *niruha* + 18 *anuvasan*) was administered. Coming to the aspect of internal medications *Aabha guggul* is mentioned in *Bhagna chikitsa* which helps in bone healing,<sup>[7]</sup> *Kukkutandatwakbhasma* acts as *kapha* and *Vatashamak* and

improves bone density,<sup>[8]</sup> Tab. Calcipral contains *shauktik bhasma* and *Kukkutandatwakbhasma*. *Aamalaki rasayan* has immunomodulatory and antioxidant properties and is *balya* for *Indriya*.<sup>[9]</sup> Also *Vatari guggul* was given which acted as *katishul nashak* as mentioned in *samhitas*.<sup>[10]</sup> *Trayodashnag guggul* was also given which acts as *Stabdhatanashak*.<sup>[11]</sup> Along with this *janu sankoch* was treated with *Tailapattabandhan* and knee traction which improved gait of patient. With this line of treatment, patient was completely recovered from *Udarka* i.e.kyphosis. And after this for *bruhan* patient was advised *Ashwagandharishta* which treats *mandagni* and increases appetite<sup>[12]</sup> along with *lashunadi vati*.

## **Conclusion**

The results indicated that *snehana*, *swedana* and *basti* treatment along with internal Ayurvedic medications gives complete cure from *udarka* of Pott's spine i.e. kyphosis. Though this is a single case study, further studies should be encouraged to establish a novel treatment regimen.

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