

**A COMPREHENSIVE STUDY OF RAJYAKSHMA AND
TUBERCULOSIS- A REVIEW ARTICLE****Mayur Rajesh Hakim^{1*} and Archana P. Gharote²**

¹Scholar Final Year, School of Ayurveda, D. Y. Patil Deemed To Be University, Nerul, Navi Mumbai.

²MD Rasa Shastra, Professor and HOD, Dept. of Rasashastra and Bhaishajya Kalpana, School of Ayurveda, D. Y. Patil Deemed To Be University, Nerul, Navi Mumbai.

Article Received on
20 April 2024,

Revised on 10 May 2024,
Accepted on 30 May 2024

DOI: 10.20959/wjpr202411-32675



***Corresponding Author**

Dr. Mayur Rajesh Hakim

Scholar Final Year, School
Of Ayurveda, D. Y. Patil
Deemed To Be University,
Nerul, Navi Mumbai.

ABSTRACT

A disease called Rajyakshma, described by Acharya Charaka, is known as the "king of the disease" because it's tough to identify and treat. Rajyakshma is often called the "king of diseases." Its name comes from "Raja" meaning king and "Yakshma" meaning decay, indicating a severe and widespread condition. Symptoms of Rajyakshma include extreme tension, restraining natural impulses, decrease in body tissues, and resisting natural urges. It affects many systems in the body and shows different symptoms. So, understanding its causes and how it develops is really important before deciding how to treat it. Rajyakshma is often associated with various immune system weaknesses. But when we examine its symptoms closely, it looks more like a disease affecting many parts of the respiratory system. As well as being classified as an Aupsargika Vyadhi, the ailment also had a

number of predisposing elements or Chaturvidha Nidana. Tridoshas and Sapta Dhātu are induced as a result of Nidana indulgence. In modern times, pulmonary tuberculosis is sometimes associated with Rajyakshma, which affects the respiratory system channels. Even though the underlying processes of Rajyakshma and pulmonary tuberculosis are different, their symptoms look quite alike. Western medicine mainly deals with infectious diseases, their transmission, different ways of diagnosis, and antibiotics recommended by the WHO. Rajyakshma is a rare illness, categorized into Sahasajanaya Rajyakshma and Vega Sandarana. Within Nidana, there are four categories: Janya Rajyakshma, Kshaya Janya Rajyakshma, and Vishamashana Janya Rajyakshma. In modern medicine, Rajyakshma may

be linked to pulmonary tuberculosis. Although tuberculosis and Rajyakshma have different causes, their clinical presentations are strikingly similar.

This paper aims to explain the basic concepts of what causes Rajyakshma and how it develops, particularly in relation to pulmonary tuberculosis and its impact on the respiratory system channels.

KEYWORDS: Rajyakshma, Tuberculosis Samprapti, Chikitsa, *Symptoms observation*.

INTRODUCTION

Ayurveda, an ancient science, outlines the importance of "deenacharya" (daily diet and routine) and "rutucharya" (Seasonal diet and routine) for maintaining long-term health. However, in today's fast-paced world, many people struggle to follow these guidelines and often lack proper nutrition and a balanced diet. Consequently, a significant number of individuals become malnourished, leading to a decline in their physical strength and immunity. As a result, they are more susceptible to infectious diseases such as pulmonary tuberculosis.

Rajyakshma is mentioned in ancient texts such as Madhavidan, Bhavprakash, Yogratnakar, Charak Samhita, Susruta Samhita, and Astanghritya. Rajyakshma holds the title of the king of all diseases.^[1] This name stems from "Raja" meaning king and "Yakshma" meaning decay, symbolizing a significant and deteriorating condition. Symptoms of *Parshwashoola* (pain in the sides), *Jwara* (Fever), *Kasa* (Cough), and *Raktashthiwana* (Bleeding disorders).^[2,3]

The causes of Rajyakshma include factors like Vegavrodhaj (Sudden suppression), Kshyaj (Depletion), Sahasaj (Extreme strain), and Veshamashanaj (Unwholesome diet).

Rajyakshma occurs due to imbalance in Tridosha and Sapta Dhatu which is described in the Susruta Samhita, is an infectious disease⁴. Due to indulging in *Sahasa*, *Vega Sandarana*, *Kshaya*, and *Vishamashana*, there is the manifestation of *Ekadasha Rupa*.

This research paper focuses on diagnosed cases of tuberculosis because Rajyakshma can be closely linked to pulmonary tuberculosis in modern times. Followers of both traditional and modern medical systems have made significant efforts to understand the development of Rajyakshma and pulmonary tuberculosis, respectively.

AIM AND OBJECTIVES

1. To study the Etiopathogenesis (Nidana and Samprapti) of *Rajayakshma*.
2. To study of *Rajayakshma* correlation with Pulmonary Tuberculosis.

MATERIAL AND METHOD

Material related to *Rajayakshma* is collected from Ayurvedic texts, various websites, and modern medical books. Additionally, available commentaries of Ayurvedic Samhitas are consulted to collect relevant information.

The study investigates about 80 consecutive instances of untreated pulmonary tuberculosis in individuals aged 12 years and above. Diagnosis relies on clinical observations, complemented by tests such as blood counts, ESR, sputum examination for AFB, and chest X-rays.

Detailed patient history and clinical examination are conducted, following Ayurvedic principles like 'nidan panchak' and other methods such as assessing digestive fire (Agni parikshan), assessing gastrointestinal health (Kostha parikshan), assessing body constitution (Prakruti parikshan), examining bodily substances (Dosha-dhatu-mala parikshan), and specifically examining the respiratory system (Pranvaha strotasa parikshan).

Ayurvedic concept of *rajayakshma*

In Ayurveda, *Rajayakshma* is also known by various synonyms such as Krodha, Yakshma, Jwara, Shosha, Kshaya, and Rogarat.^[5]

According to Acharya Charaka, when there's an obstruction in the Rasavahi Srotas, the Rasa Dhatu accumulates in its usual place. Subsequently, this accumulated Rasa Dhatu rises, leading to symptoms like cough (Kasa) and others. This process gives rise to Shadrupa and Ekdasha rupa, collectively forming the clinical presentation known as *Rajayakshma*.

Rajayakshma can be classified into 4 types^[6]

1. *Sahasaja Rajayakshma*
2. *Sandharanaja Rajayakshma*
3. *KshayajaRajayakshma*
4. *Vishmashanaja Rajayakshma*

Nidan

After reviewing all the classics, it is discovered that *Rajayakshma* has four main causes,

which can each cause the ailment on their own or together.

1. *Sahasa*
2. *Vega Sandharana*,
3. *Kshaya*,
4. *Vishamashana*

Poorva roop

1. *Pratisyayo (Coryza)*
2. *Dorbalyam (Debility)*
3. *Doshadarshnam adosheshu api bhaveshu (Picking faults unnecessarily)*
4. *Kaaye bibhatsdarshnam (Morbid appearances on the body)*
5. *Gharnitvam (Feeling of disgust)*
6. *Balmansaparichhaya (Loss of strength and flesh despite eating adequately)*
7. *Streemadhyamansa priyata (Craving for women, wine, and meat)*
8. *Priyata ch avgunthne (Desire to be covered, feeling cold)*
9. *Makshikaghunkeshanama trinanaam patani ch praayo annpaane (Imagined feeling of food being infested)*
10. *Keshanaama Nakhanaam ch abhivardhnama (Rapid hair and nail growth)*
11. *Patryebhi patengyesh ch shavpadyesch abhigharshnam (Imagined attacks by birds and animals)*
12. *Swapne keshasthirashinaam bhashmn se ch adhirohnam (Dreams of climbing heaps of hair, bones, and ashes)*
13. *Jalashyanaam shailanaam vananaam jyotishamapi shushyataam (Dreaming of dried ponds, mountains, and forests)*

Roop

Triroopa Rajyakshma

1. *Amsaparshava abhitapa - Burning sensation in the shoulders*
2. *Santapa kara padyo - Burning sensation in hands and feet*
3. *Jwara - Fever*

Shadroopa rajyakshma

1. *Jwara - Fever*
2. *Kasa - Cough*
3. *Swarbheda - Impairment of voice*

4. *Aruchi - Anorexia*
5. *Parshavshoola - Pain in the sides of the chest*
6. *Atisara - Diarrhoea*

Ekadasharoopa rajyakshma

1. *Jwara- Fever*
2. *Kasa- Cough*
3. *Swarabheda- Impairment of voice*
4. *Aruchi- Anorexia*
5. *Paarshva shoola- Pain in the sides of the chest*
6. *Atisara- Diarrhoea*
7. *Anasavmarda - Pain in shoulders*
8. *Shwasa - Dyspnoea*
9. *Siroshoola- Headache*
10. *Sleshma chhardi- Spitting of phlegm*
11. *Rakta sthivana- Hemetemesi*

Samprapti

Other Acharyas have reported the pathogenesis of two forms of Anuloma Kshaya and Pratiloma Kshaya. Dhatukshaya is primarily responsible for Rajayakshma (Tissue emaciation or loss). In Rajayakshma patients, this process always initiates the pathogenesis. Furthermore, metabolic dysfunction (Dhatwagninasana) is inevitable, leading to the loss of rasa (Tissue fluid), rakta (Blood), mamsa (Muscle), meda (Adipose tissue), and sukra (Generative tissue). Anulomakshaya results from the ultimate decline of immunity, or ojokshaya. According to Ayurvedic principles, Pratiloma kshaya occurs when a unique metabolic change results in the sequential loss of several dhatus (Tissues) such as Ojokshaya, sukra, and meda preceding rasa dhatu.^[7, 8]

Chikitsa

Ayurvedic treatments for rajayakshma

1. **Snehana:** Therapeutic oils infused with herbal components are warmed and massaged into the affected Dosha. This aids in liquefying and expelling toxins (Ama) from the body's channels.
2. **Swedana:** Various methods are employed to induce sweating, which helps balance the Dosha and eliminate Ama.

3. **Vamana:** This technique induces vomiting to eliminate Ama and restore Dosha balance. It's recommended especially when the patient is strong and Doshas are intensely aggravated. For Rajayakshma, gentle vomiting (Mridu Vamana) is advised when Doshas are dominant.
4. **Virechana:** Laxative herbs are ingested orally to stimulate intestinal evacuation, similar to Vamana in purifying Ama.
5. **Shamana chikitsa:** This involves the use of herbal medicines like Vasa, Guduchi, Madhuka, Bharngi, Puskaramoola, Dasmoola, Ashwagandha, etc., as mentioned in Charaka Samhita to alleviate symptoms of Rajayakshma. Some effective formulations include Eladi Churna, Sitopladi Churna, Talishadi Churna, Yavandi Churna, Vasadi Ghrita, Amritaadhya Ghrita, Dashmoola Ghrita, Satapaka Taila, Vasaavaleha, Sarpiguda, Chyavanprasa Avaleha, Mahalaxmivilasa Rasa, and Chitrakaharitaki.

Tuberculosis (TB)

Tuberculosis (TB) is a potentially serious infection primarily affecting the lungs. The bacteria (*Mycobacterium tuberculosis*) responsible for TB spread from one person to another through tiny droplets released into the air when an infected individual coughs or sneezes.

Signs and Symptoms of TB include

1. Persistent cough lasting three weeks or more
2. Coughing up blood or mucus
3. Chest pain, especially when breathing or coughing
4. Unintended weight loss
5. Fatigue
6. Fever
7. Night sweats
8. Chills
9. Loss of appetite

Causes of tuberculosis

Tuberculosis is caused by bacteria transmitted through microscopic droplets released into the air. This occurs when someone with untreated active TB coughs, speaks, sneezes, spits, laughs, or sings. While TB is contagious, it's not easily transmitted.

OBSERVATION

Age

Individuals aged between 21 and 40 years, particularly males, are more prone to tuberculosis.

Class, Occupation and Habbits

This susceptibility is especially notable among those from lower socioeconomic backgrounds engaged in manual labor or heavy vehicle driving, and who have habits like smoking and drinking.

Prakruti

They may exhibit body constitutions characterized by Vata-pitta, Vata-kapha, or Kapha-pitta dominance.

Tuberculosis can be triggered by factors such as depletion, dietary irregularities, and parasitic infections.

Common symptoms include breathlessness, cough, poor digestion, and loss of appetite.

The disease typically progresses in a downward pattern in 98% of cases, leading to complications like cavity formation, chest pain, and abdominal tuberculosis.

These individuals often experience impaired digestive fire, bodily energy imbalances, and affected tissues like plasma and muscle.

Diagnostic indicators commonly include weight loss, positive sputum tests, elevated blood sugar levels, positive chest X-rays, and elevated ESR levels.

CONCLUSION

Rajayaksma is a Tridoshaja Vyadhi, primarily involving Vata and Kapha Dosha, making it an ideal example of Madhyama Roga Marga. In Rajayaksma, all seven Dhatus are affected, with each Dhatu being in a state of depletion (Kshayavasta). Symptoms of Rajayaksma vary based on factors like excessive stress, suppression of natural urges, depletion of Dhatus, and dietary irregularities. Depletion of Dhatus in Rajayaksma occurs through two different pathways depending on the direction of depletion. Understanding the underlying causes and pathogenesis is crucial before planning treatment. Hence, it's important to avoid factors

responsible for causing Rajayakshma. Identifying the progression of the disease through Samprapti Vighatana is essential for diagnosis and effective management.

REFERENCES

1. Vagbhata, Ashtanga Hridaya Nidana, In K R Shrikantha Murthy, Ashtanga Sangraha of (text book with English translation), Third edition, Varanasi, I: 5-3.
2. Sushruta, Sushruta Uttara Tantra, In Sharma PV. Sushruta Samhita (With English translation of text and Dalhan's commentary along with critical notes) Reprint edition, Varanasi, Chaukhambha Visvabharti, 2005; II: 41-11.
3. Agnivesh, Charak Chikitsa, In K R Srikantha Murthy Charak Samhita (text book with English translation), reprint edition, Varanasi, Chaukhambha Orientalia, 2009; II: 8-44.
4. Sushruta samhita, Nidan sthan, 33: 5-32.
5. https://www.researchgate.net/publication/339167124_Conceptual_Study_on_Nidana_And_Samprapti_Of_Rajayakshma
6. Shastri K, Charak Samhita, Vidyatini Hindi Commentary, editors. Varanasi: Chaukhamba Sanskrit Series, 1969.
7. YT, editor. Charaka Samhita of Charaka, Nidana Sthana, chapter. reprinted, Varanasi; Chowkhambha Sanskrit Series, 2008; 217(28): 6-4.
8. Tripathi B, editor. Madhavanidanam of Sri Madhavakara with the Sanskrit Comm. Madukosa by Vijayaraksita and Srikanthdatta, chapter Choukhamba Surbharati Prakashan Varanasi, 2006; 65(26): 10-2, I.