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Case Study

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# A CLINICAL STUDY OF KAPHAJA KASA WITH SPECIAL REFERENCE TO SPUTUM CULTURE EXAMINATION- A CASE REPORT

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## **ABSTRACT**

Kasa Roga is a prevalent condition associated with Pranavaha Srotas and is classified into five types, among which Kaphaja Kasa is one of the most commonly observed. It typically presents as a productive cough, often linked to bacterial infections. Sputum culture examination is a key diagnostic tool used to identify the underlying infectious agent in respiratory disorders. In the current context, a significant number of patients are turning to Ayurvedic treatment for managing Kaphaja Kasa. However, determining the exact infectious cause remains a challenge for Ayurvedic practitioners. To address this, a specific case of Kaphaja Kasa was studied in conjunction with its sputum culture results to explore any microbial association. The findings were analyzed, discussed, and a conclusion was drawn based on the observations.

**KEYWORDS:** Pranavaha Srotas, Kasa Roga, Kaphaja Kasa, Infection, Respiratory Disorder, Sputum Culture Examination,

Microorganism.

#### INTRODUCTION

Kasa roga is a disease of Pranavaha Srotas and is broadly classified into five types based on dosha's. Kaphaja Kasa is one of these types which is caused by an imbalance of Kapha &

Vata dosha's. Kaphaja Kasa<sup>[1]</sup> is a productive type of cough which may be due to infectious or non-infectious cause.

Sputum culture examination is an important test to determine the cause of bacterial infection. In the present scenario many patients opt for Ayurvedic treatment for Kaphaja kasa but it becomes difficult for an Ayurvedic practitioner to ascertain the cause. So, for this a certain case of Kaphaja kasa and its sputum culture examination was studied to find out the relation of any bacterial infection.

# MATERIALS AND METHOD

A clinical case study was done on a pre-diagnosed case of Kaphaja Kasa who came to Govt. Ayurvedic College & Hospital, dated 5/08/24 with registration number 40167. Patient came with the c/o wet cough from last 1 week. On examination, we found that the BP & Pulse were within normal limits. Air entry was bilateral symmetrical & Patient had fine crepitations over the apex of left lung. Ashtasthana pareeksha was done and it was found that jihwa was lipta and swarabheda was present. Rest was found to be normal. Her Sputum culture was done at Central Laboratory, Govt. Ayurvedic College & Hospital, Guwahati to find out any cause of infection.

Early morning sputum specimen was collected in a closed sterile container by the patient. Platinum loop was used to inoculate the sample onto Cled & Blood Agar culture media. The culture media were incubated aerobically at 37°C for 48hrs and the growth was observed. A Gram staining was done from the growth and finally viewed under microscope in 100x (oil immersion) lens to study the morphology of the bacteria. After that the morphology of the culture media was studied and simultaneously the necessary biochemical tests were done to identify the type of bacteria.

# **OBSERVATION AND RESULT**

- 1) Gram staining- Gram positive bacteria that are cocci-shaped are tend to be arranged in clusters.
- 2) Coagulase<sup>[2]</sup> & Catalase tests<sup>[3]</sup>- Positive. It showed the presence of Staphylococcus aureus.
- 3)  $\beta$ -Hemolysis<sup>[4]</sup> Clear transparent zone appeared around the colonies of bacteria that completely lysed the RBC's in blood agar.

4) Cled agar – Deep yellow colonies which appeared like mustard seeds was found to be present.

From the above observations it was diagnosed as Staphylococcus aureus.

## **DISCUSSION**

Bacteria can be correlated with that of Krimi, as it is described to be sukshma or anu. As we observed the growth of the bacteria in blood agar plate in this case, therefore it can be correlated with Raktaja Krimi.<sup>[5]</sup> Moreover, Raktaja Krimi is described as round in shape, minute, devoid of legs, so it can be compared to bacteria. Charak has mentioned that when excessively grown, they eat away or destroy the tissues, etc of that particular place; likewise, We can observe the same phenomenon in the Blood agar plate as well where clear transparent zone appears around the colonies of bacteria that completely lysed the RBC's which is known as β-Hemolysis. In this case of Kaphaja Kasa, Staphylococcus aureus was detected and can be correlated with Raktaja Krimi. So, a specific treatment for Kaphaja Kasa due to Raktaja Krimi may be helpful for the treatment of productive cough due to Staphylococcus aureus.

## **CONCLUSION**

From the study it can be concluded: -

- 1) The present case of Kaphaja Kasa was identified to have an infectious cause.
- 2) The bacteria involved in the Kaphaja Kasa was Staphylococcus aureus.
- 3) The Staphylococcus aureus which was found in this case can be correlated with Raktaja Krimi.

# **REFERENCES**

- 1. Pt. Sastri Kashinatha, Dr. Chaturvedi Gorakhnath, Part 2, Kasa chikitsa adhyay, Charaka Samhita of Agnivesha, Reprint, 2021; Page- 482 (verse no. 18-19).
- 2,3&4. Chakraborty P. A text book of Microbiology, 5 th reprint 2001, 23rd chapter, Page-239.
- 5. Pt. Sastri Kashinatha, Dr. Chaturvedi Gorakhnath, Part 1, Vyadhita rupiya vimanam, Charaka Samhita of Agnivesha, Reprint, 2021; Page- 646 (verse no. 11).