



ACUTE DYSPHAGIA TOXICITY DURING VMAT RADIOTHERAPY FOR LUNG CANCER

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INTRODUCTION

Radiation-induced dysphagia is a common and distressing side effect of radiotherapy for lung cancer. It can cause treatment interruptions and compromise tumor control. Symptoms include pain while swallowing, difficulty swallowing, and a sensation of food sticking in the throat or chest.



OBJECTIVES

This study aims to investigate the incidence, underlying mechanisms, and management strategies of acute dysphagia in patients undergoing radiotherapy for lung cancer.



METHODS

A prospective study was conducted on sample involving lung cancer patients who undergoing 30 fractions of VMAT radiotherapy. Patient demographics, cancer staging, radiation dose and clinical assessment, including the development of acute dysphagia were analyzed. Dysphagia Toxicity was categorized according to the **National Cancer Institute (NCI) grading**.



RESULTS

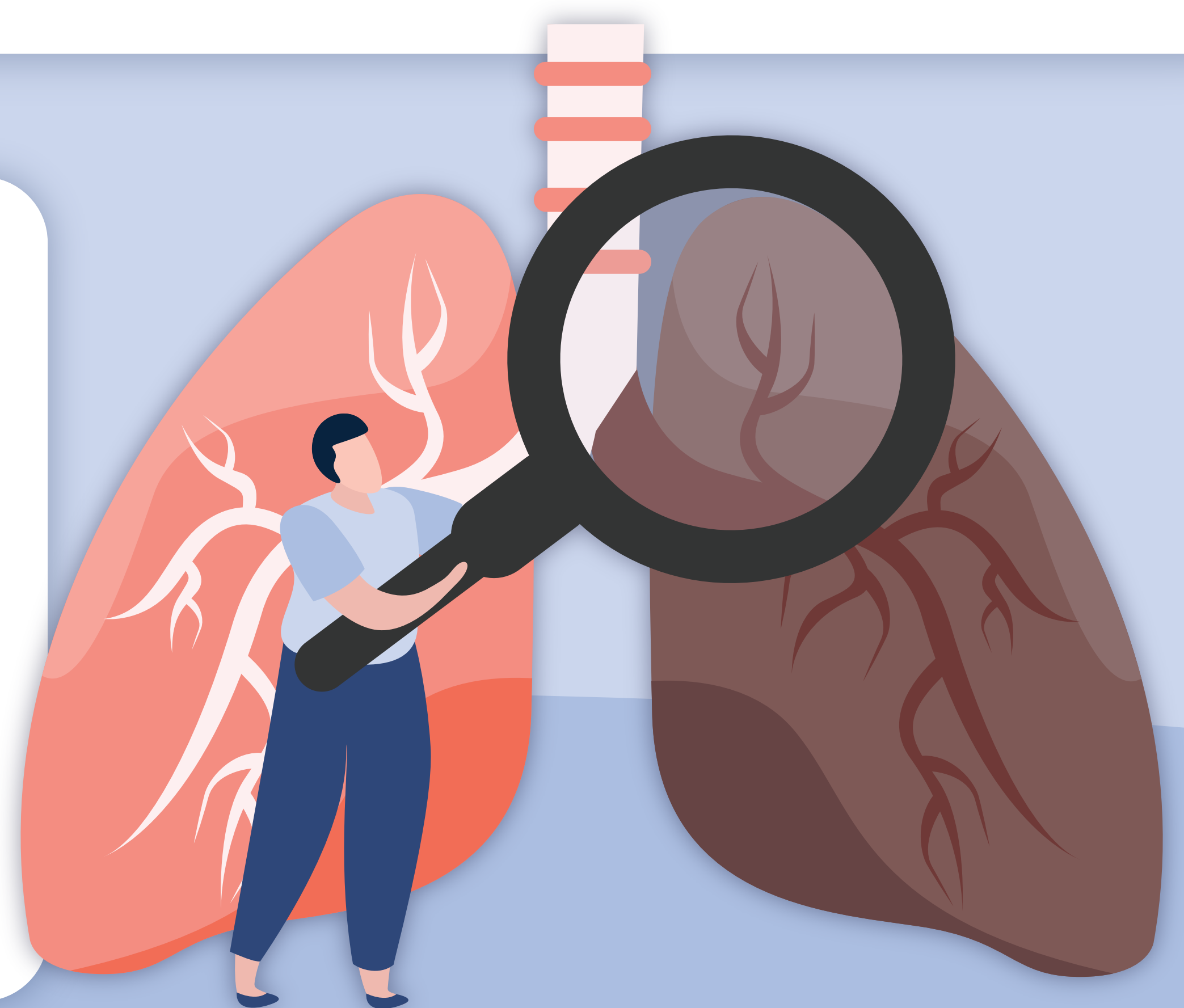
- The study included **30 lung cancer patients** treated with **30 fractions of VMAT (60 Gy)** between **2023 and 2024**.
- **Median age:** 55–60 years.
- **75% developed acute dysphagia** during treatment.
- A significant correlation was observed between a **mean esophageal dose <34 Gy** and the development of dysphagia symptoms.
- Most cases were managed conservatively with **dietary modifications and symptomatic relief**.
- A smaller percentage required additional interventions, such as **analgesics**.
- Most patients experienced resolution of symptoms **within 2 weeks** post-treatment.
- **Patients receiving concurrent chemotherapy exhibited a higher incidence of swallowing difficulties.**



CONCLUSIONS

Acute dysphagia is a significant toxicity during radiotherapy for lung cancer with multiple factors. Prevention strategies, including **careful radiation planning** to minimize the dose to critical structures, and **early intervention** are essential for improving patient outcomes.

Prophylactic measures and regular monitoring for early signs of dysphagia is essential and can help mitigate symptoms as soon as they arise.



REFERENCES

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