

The Egyptian Society of Chest Diseases and Tuberculosis  
Egyptian Journal of Chest Diseases and Tuberculosis

[www.elsevier.com/locate/ejcdt](http://www.elsevier.com/locate/ejcdt)  
[www.sciencedirect.com](http://www.sciencedirect.com)



## ORIGINAL ARTICLE

# Aetiologic mechanisms of dysphagia in lung cancer: A case series

Wafaa A. Hassan <sup>a,\*</sup>, Kamal Darwish <sup>d</sup>, Ibraheem M. Shalan <sup>d</sup>, Laila Abd Elbaki <sup>b</sup>,  
Esam Abd Elmohsen <sup>c</sup>, Wageeh Hassan Sayed <sup>d</sup>

<sup>a</sup> Chest Diseases, Faculty of Medicine, Assiut University, Assiut, Egypt

<sup>b</sup> Tropical Medicine Department, Faculty of Medicine, Assiut University, Assiut, Egypt

<sup>c</sup> Internal Medicine Department, Faculty of Medicine, Assiut University, Assiut, Egypt

<sup>d</sup> Chest Diseases, Al-Azhar University, Egypt

Received 14 September 2013; accepted 21 October 2013

Available online 9 January 2014

### KEYWORDS

Lung cancer;  
Dysphagia;  
Prevalence;  
Oesophagoscopy;  
Oesophagomanometry

**Abstract** *Background:* Associated symptoms of bronchogenic carcinoma other than chest complaints like dysphagia are rarely demonstrated in literature regarding prevalence, cause–effect relationship and proper management plan. Gastrointestinal motility disorder as a cause of dysphagia in lung cancer is incompletely understood. This prospective preliminary study aims to find out the prevalence and different aetiologic mechanisms for dysphagia among lung cancer patients using oesphagoscopy and oesophageal manometry.

*Patients and methods:* All lung cancer patients with dysphagia admitted in the Cancer Institute, Assiut University during the year 2010–2012 were included in the study. All patients were subjected to oesophagoscopy and oesophagomanometry study.

*Results:* We collected 165 cases of bronchogenic carcinoma during the study period. Dysphagia was diagnosed in 20 cases (12.1%) regardless the stage of malignancy. Four separate dysphagia causes were identified. Secondary achalasia was diagnosed in 10 cases (50%), whereas enlarged mediastinal lymph nodes and candidal oesphagitis in 4 cases each (20%), and chemoradiotherapy in 2 cases (10%).

*Conclusions:* Dysphagia associated with bronchogenic carcinoma is not uncommon and should be asked for and documented in all cases if present. Secondary achalasia is the commonest mechanism of dysphagia based on oesophagoscopy and manometry. Further large sample multicenteric

\* Corresponding author. Tel.: +20 01006368362.

E-mail address: [wafaagadallah@yahoo.com](mailto:wafaagadallah@yahoo.com) (W.A. Hassan).

Peer review under responsibility of The Egyptian Society of Chest Diseases and Tuberculosis.



Production and hosting by Elsevier

studies are needed to outline a proper management plan for dysphagia in lung cancer in collaboration with the gastroenterology medical and surgical departments.

© 2014 The Egyptian Society of Chest Diseases and Tuberculosis. Production and hosting by Elsevier B.V. Open access under CC BY-NC-ND license.

## Introduction

Cough, hemoptysis, chest pain and weight loss are classic symptoms of bronchogenic carcinoma. Dysphagia is rarely mentioned in this symptom complex [1]. Gastrointestinal motility disorder as a cause of dysphagia in lung cancer is incompletely understood. There probably is a functional aetiology in rare cases. It may appear because of a reflex disturbance [2].

For the most part, an organic agent with underlying mechanical factors causes the dysphagia. First, compression of the pharynx and upper oesophagus by enlarged, tumour-bearing lymph nodes in the neck may be a cause. Second, and most common of all, deviation and compression of the oesophagus by involved lymph nodes in the mediastinum, with, and possibly without fixation of the oesophageal wall, produce dysphagia. Tumour erosion into and through the oesophageal wall forming a tracheoesophageal fistula occurs. Occasionally, it becomes an unfortunate late complication of radiotherapy [3].

In this study we tried to find different aetiologies for dysphagia among lung cancer patients using oesphagoscopy and manometry.

## Patients and methods

All lung cancer patients with dysphagia admitted in the Cancer Institute, Assiut University during the year 2010–2012 were included in the study. A total of 20 patients, 14 patients (70%) were men and 6 patients (30%) were women. The median age of the patients was  $55 \pm 8$  years. An assessment respiratory questionnaire containing respiratory symptoms, chest x-ray, bronchoscopy, CT reports and final pathological diagnosis was filled for each patient. All CT examinations were performed with a Somatom Plus S CT unit (Siemens, Erlangen, Germany). All patients had gone through upper gastrointestinal endoscopy before the manometry study. Manometry was always performed by the internal medicine doctor, assisted by one of specially trained nurses. High Resolution Manometry was performed through nasal introduction of solid state catheter with 32 transducer (pressure sensor) spaced 1 cm to the oesophagus and stomach [4]. The system is plotting graphs with high resolution colour topography and pressure wave plotting as well. This software was produced by Medical Measurement System (MMS) Enscheda, The Netherlands.

## Results

This prospective study was conducted between April 2010 and May 2012 in the Assiut Cancer Institute, Assiut University, Assiut, Egypt. We collected 165 cases of bronchogenic carcinoma during the study period. Dysphagia was diagnosed in 20 cases (12.1%) regardless of the stage of malignancy. Four separate dysphagia causes were identified. Secondary achalasia

was diagnosed in 10 cases (50%), whereas enlarged mediastinal lymph nodes and candidal oesphagitis in 4 cases each (20%), and chemoradiotherapy in 2 cases (10%) (Table 1). The four causes, with illustrative case histories, are discussed in detail below.

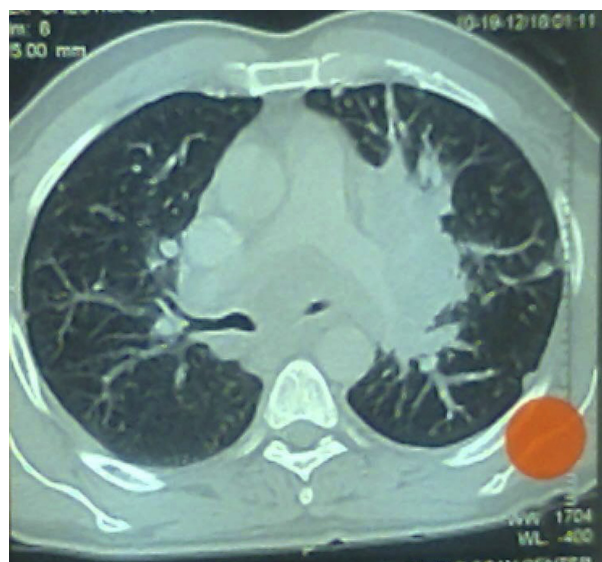
### *Dysphagia due to enlarged mediastinal lymph nodes*

#### *Case No. 1*

A 65 year old male patient presented with features of worsening airflow obstruction, he had dysphagia for solids for 3 months. Post contrast CT chest showed central large soft tissue tumour mass lesion with enlarged multiple mediastinal lymph nodes obliterating the lumen of the oesophagus (Fig. 1). Fiberoptic bronchoscopy showed large tumour mass in the left main bronchus. Bronchoscopic biopsy diagnosed

**Table 1** Different causes of dysphagia among the study group.

Causes of dysphagia		Number	%
1	Enlarged mediastinal lymph nodes	4	20
2	Secondary achalasia	10	50
3	Dysphagia after chemoradiotherapy	2	10
4	Dysphagia due to candidal infections	4	20
Total		20	100



**Figure 1** CT scan of the chest showing multiple mediastinal lymphadenopathy obliterating the oesophageal lumen (secondary to poorly differentiated squamous cell carcinoma of the left lung).

Download English Version:

<https://daneshyari.com/en/article/3400357>

Download Persian Version:

<https://daneshyari.com/article/3400357>

[Daneshyari.com](https://daneshyari.com)