



EVALUATION OF INVOLVEMENT OF ADJACENT STRUCTURES IN ESOPHAGEAL MALIGNANCY BY CONVENTIONAL BARIUM SWALLOW AND CT SCAN.

Radiodiagnosis

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ABSTRACT

Oesophageal malignancy is the eighth most common malignancy in the world with an annual incidence of 456,000 new cases. In India, it is the fourth most common cause of malignancy-related deaths. This study used data evaluating involvement of adjacent structures in esophageal malignancy among 57 patients which were diagnosed at radiology department of Dhiraj hospital piparia, waghodia. Out of 57 patients with detected esophageal malignancy, Most commonly involved structure was trachea (38.46%) and least commonly involved structure was pleura and diaphragm having equal incidence of 7.7% each. CT scan is excellent in diagnosis of various site involved, distant metastasis and lymphadenopathy in esophageal malignancy.

KEYWORDS

Oesophageal malignancy, CT Scan, adjacent structures.

INTRODUCTION:-

Oesophageal malignancy is the eighth most common malignancy in the world with an annual incidence of 456,000 new cases. In India, it is the fourth most common cause of malignancy-related deaths. In study done by cancer research UK (May 2012) shows the most site was lower oesophagus. Approximately, 47,000 new cases are reported each year and the reported deaths reach up to 42,000 each year in India. Population-based data suggest that oesophageal malignancy incidence peaks in the sixth decade in most parts of the world. The same trend has been reported in India, with the mean age in women slightly earlier than in men. Squamous cell carcinoma are twice as common in men compared to women. For thoracic oesophageal tumours the accuracy of CT was 59% for fat plane status, 86% for aortic contact, 81% for tracheobronchial tree compression and 66% for direct local invasion. CT was 69% accurate for identifying lymph nodes, of which only 38% contained metastatic deposits. This study is an attempt to evaluate involvement of adjacent structures in the oesophageal malignancy in patients coming to the Radiodiagnosis department of dhiraj hospital, piparia, vadoda.

Aims and objective:-

The aim is to evaluate involvement of adjacent structures in esophageal malignancy by conventional barium swallow and CT scan.

MATERIAL AND METHODS:-

This study used data of patients presented in radiology department in Dhiraj hospital piparia, waghodia from January 2018 to August 2019. A 57 patients were diagnosed having esophageal malignancy using conventional barium swallow and 16 slice simmens CT scan and using prospective and observational (non interventional) type of study.

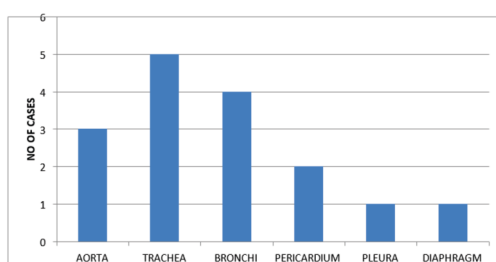
DISCUSSION:-

Table : involvement of adjacent structures

Structure Involved	Aorta	Trachea	Bronchi	Pericardium	Pleura	Diaphragm
Present	3	5	4	2	1	1
Percentage (%)	23.07	38.5	30.7	15.4	7.7	7.7

Chart

INVOLVEMENT OF ADJACENT STRUCTURE



In my study the incidence of involvement of adjacent structure was 22.8%. Trachea was the most commonly involved with incidence of 38.5% cases followed by bronchi 30.7%. In study done by Consigliere D et al. Which showed incidence of involvement of aorta was 86% followed by tracheobronchial tree involvement in 81% of cases.

CONCLUSION:-

Carcinoma oesophagus is a fatal malignancy owing to high rate of metastasis at the time of diagnosis of the condition. Any patient presenting with symptoms of progressive dysphagia should undergo investigation. Barium swallow is the initial investigation of the choice but does not allow staging and biopsy. Double contrast barium swallow is more accurate in detecting early carcinoma. CT scan is excellent in the diagnosis of distant metastasis and lymphadenopathies. Thus, evaluation of various CT findings and preoperative staging of carcinoma of oesophagus will help to decide management of these patients. Hence, CT plays an important role in detecting and staging carcinoma of oesophagus.

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