## INTRODUCTION

Spiral CT has become the standard for evaluation of the chest in patients with bronchogenic carcinoma, it takes advantage of new slip ring technology with continuously rotating detectors allowing rapid data acquisition through the chest during single breathhold (*Redina A et al,1998*).

Spiral CT facilitates optimization of intravenous contrast administration by obtaining the scans during the peak of vascular enhancement. The absence of respiratory misregistration or movement artifacts with sophisticated computer processing permits instantaneous generation of superb two dimensional multiplanar reformatting at the consol, in any desired plane, without step-like discontinuities that result from the use of discrete conventional scans. Such coronal, sagittal or oblique images improve the diagnostic accuracy (*Prasad A,2001*).

The depication of spatial relationships between a lesion and surrounding structures improves greatly with spiral CT (*Mushine JL* 2002)

The spiral CT generated orthogonal reconstructions in patient with bronchogenic carcinoma with evaluation of vessels, air ways and mediastinum further helps in staging (*Chartrand-lefebvre C et al.* 1998).

Spiral CT has better spatial resolution and shorter imaging time than MRI, besides being less expensive and more widely available (*Lee JM et al 2004*).

Spiral CT scans may eventually prove to be an effective lung cancer screening tool specially for detection of early lung cancer s in smokers (*Kaneko M et al,1996*).

## **AIM OF THIS WORK**

The Aim of the study is to study the role of spiral CT in early detection of lung cancer and the possibility of applying it as screening modality in order to decrease mortality rate from lung cancer.