INTRODUCTION

Colorectal tumors are several different types approximately 50 % adenomatous, 30 % metaplastic and the reminder hamartoma and lipoma which are very uncommon ***(Sutton D., et al. 2003).***

Adenocarcinoma of the rectum is a major cause of mortality and morbidity in North America and Western Europe. Rectal cancers are, after colon cancers, the second most common gastrointestinal carcinoma and have the best prognosis. The 5-year survival rate is approximately 50%. Screening for and removing adenomatous polyps may improve survival rates. Almost all rectal cancers are primary adenocarcinoma ***(Isaac H., et al. 2005).***

Multislice spiral C.T. colonography detect all primary neoplasms, providing correct staging of 96.5% of tumors and visualizing the whole colon even in patients with stenosing lesions. Considering the current limitations of the other procedures and the possibility of assessing both the colon and extracolonic structures, Multislice spiral C.T. colonography can be proposed as the initial diagnostic modality for pre-operative evaluation of patients with colorectal carcinoma ***(Laghi A., et al. 2003).***

Computerized tomography (C.T.) colonography is emerging as an important radiologic investigation for colorectal neoplasia, with diagnostic performance likely

exceeding barium enema and comparable with optical colonoscopy. Employing state-of-the-art multislice technology, C.T. Colonography allows a complete examination of the colon and surrounding organs in less than 30 seconds. ***(Burling D., et al. 2004)***

Multislice technology enables fast scanning with high resolution. To minimize the radiation dose, efforts have been made to adapt the tube current to the minimum accepted dose while not diminishing study performance. Acquired CT data are transferred on to a dedicated workstation equipped with navigator software, which permits the radiologist to obtain multiplanar reformations as well as construct an endoluminal model of the air-distended colon ***(Sosna J., et al. 2004).***

With the introduction of multislice CT extensive volumetric data sets can be quickly acquired in high spatial resolution. The high spatial resolution reduces partial volume effects and enables multiplaner reconstructions. ***(Vogl T.J., et al. 2004)***

Aim of The work

The aim of this study is to investigate the clinical significance of multislice- CT in the diagnosis of colorectal tumors with special reference to their morphology.