INTRODUCTION & AIM OF THE WORK

Rectal carcinoma is considered as the second commonest epithelial cancer after bronchogenic carcinoma. In males colorectal carcinoma is the second only to carcinoma of the lung as a cause of cancer death. In females it is the third after carcinoma of lung and breast cancer . The overall incidence in men and women is approximately equal **(Dodd 1977).**

A high intake of fat and deficiency in dietary fibers are strongly associated with large bowel carcinogenesis. Sporadic adenomatous polyps are a definite predisposing factor. Malignant changes are found in 5% of tubular adenomas and 40% of villous adenomas **(Burnstein 1993).**

Screening of a large populations with a high risk for colorectal malignancy to detect cancers at earlier curable stages is the policy of choice. The most promising directions for colorectal screening will be the detection of altered colonic cell proliferation. The latter is expressed by biological markers in normal appearing rectal mucosa, so rectoscopy and biopsy are advised **(Liebermann 1992).**

Removal of already existing pre malignant adenomatous polyps in patient with a positive fecal occult

blood test (FOBT) has significantly reduce mortality rate for cancer of the rectum **(Winawer et al 1991)**.

However recent studies has shown that the above tests can miss as much as 50% of concomitant polyps in the rest of the colon necessitating the use of double contrast enema as an adjunct way for screening **(Foutch et al 1991).**

Modern radiography plays two roles in evaluation of colorectal tumours. In the first is used primarily for diagnostic purposes. Second radiography is employed to assess the extent of colonic and extracolonic involvement (Staging).

Rectal carcinoma may be obvious from sigmoidoscopy but a double contrast barium enema is still worth while pre-operatively as synchronous carcinoma may be detected in 9.3% of individuals and polyps in 23.4% when only 4.3 % and 14.7% respectively may be recognized at laboratory studies **(Isabel 1988).**

A chest radiography, hepatic and renal ultrasonography provide the basic screening for metastatic disease.

Computed tomography (CT) may be used to define the extent of the extraluminal mass, particularly in patients with large tumours when radiotherapy is planned, and to monitor the response **(Dixon 1981).**

CT will show spread of more than (2 cm) into perirectal fat and involved lymph nodes greater than (1.5 cm) in diameter.

Rectal endosonography provides more exact information regarding tumour penetration of the bowel wall but gives less information than CT about involvement of pelvic structures (**Rifkin et al 1986).**

Once the disease is diagnosed comes the importance of prospective accurate staging before adjunct radiation therapy and sphincter preservation surgery can be applied **(Rifkin et al 1989).**

AIM OF THE WORK

The aim of this work is to demonstrate the role of CT in staging of rectal carcinoma.