DIAGNOSIS AND LOCAL STAGING OF RECTAL CARCINOMA BY MRI

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Degree in Diagnostic Radiology

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List of Contents

Title	Page No
Introduction	2
Aim of work	3
Abstract	4
Review of literature I-Anatomy • Surgical anatomy	7-12
• MRI anatomy	13-16
II-Pathology	18-22
III-Overview of rectal carcinoma	24-27
IV-Imaging modalities of rectal carcinoma	29-46
Patients& methods	48-52
Results	54-57
Cases	59-68
Discussion	70-77
Summary& conclusion	79-82
References	84-89
Arabic summary	90

List of abbreviations

CRC	Colorectal Cancer
CRM	Circumferential Resection Margin
CT	Computed Tomography
FDG	18F-FluoroDeoxyGlucose
FOV	Field Of View
HRT	Hormone Replacement Therapy
IMV	Inferior Mesenteric Vein
MRI	Magnetic Resonant Imaging
MRF	Mesorectal Fascia
PET/CT	Positron Emission Tomography
TME	Total Mesorectal Excision
TNM	Tumor, lymph Nodes, distant Metastasis
TRUS	Transrectal Ultrasound
US	Ultrasound

List of figures

Figure number and title	Page No
Figure (1) Coronal illustration of rectum & anal canal anatomy.	7
Figure (2) Coronal illustration of arterial supply, venous & lymphatic drainage of the rectum and anal canal.	10
Figure (3) Axial T2-weighted sequence shows normal rectal wall anatomy.	13
Figure (4) Axial T2 weighted image shows Rectum is surrounded by mesorectal fat within the mesorectal fascia.	14
Figure (5) Coronal turbo spin-echo T2-weighted MR image shows the normal anatomy of the rectum.	15
Figure (6) Normal anatomy of the mesorectum	16
Figure (7) Diagrammatic illustration of T stage.	20
Figure (8) Coronal illustration of the rectum with a tumor extending through the rectal wall into the mesorectal fat and with some lymph nodes.	27
Figure (9) Transverse plane of endorectal US exam of rectal carcinoma showing a mass lesion and LN deposit.	29
Figure (10) Oblique coronal CT reformatted image perpendicular to the tumor axis shows mesorectal	30

fascia speculations extending into the peri-rectal fat.	
Figure (11) Axial and sagittal fused PET/CT images of the pelvis showed increased FDG uptake of recurrent rectal carcinoma after resection & chemoradiotherapy.	31
Figure (12) Sagittal turbo spin-echo T2-weighted MR image obtained with a high-resolution phased-array surface coil shows a stenosing lesion of the rectal lumen.	32
Figure (13) Sagittal illustration of tumor location.	34
Figure (14) Coronal illustration of low rectal cancer showing distal tapering of the mesorectum.	35
Figure (15) Axial illustration of T-stage of rectal carcinoma & tumor relation to CRM	37
Figure (16) Axial T2 weighted image shows a T2 tumor.	38
Figure (17) Axial T2 weighted image shows a T3 CRM-ve tumor.	38
Figure (18) Axial T2 weighted image shows perirectal fat stranding.	39
Figure (19) Axial T2 weighted image shows a T3 CRM+ve tumor.	40
Figure (20) Axial T2 weighted image shows a T4 tumor (prostate invasion).	40

Figure (21) Axial T2 weighted images shows proper& improper angulation.	41
Figure (22) Sagittal T2 weighted image shows low rectal cancer with multiple nodes in the perirectal fat on the posterior side.	43
Figure (23) Axial T2 weighted image shows Local recurrence of rectal cancer after TME due to positive extramesorectal lymph nodes.	44
Figure (24) Axial T2-weighted images of two different rectal cancer patients. On the left small extra mesorectal lymph node. On the right numerous large mesorectal lymph nodes and a right extramesorectal lymph node with indistinct borders.	45
Figure (25) Axial T2-weighted images of the same rectal cancer patient. On the left there are 3 mesorectal lymph nodes depicted. On the right after rectal enema no lymph nodes could be seen in the mesorectum due to rectal over distension**.**	49
Figure (26) Sagittal illustration of MR protocol.	50
Figure (27) Axial T2-weighted images of the same rectal cancer patient. On the left with improper angulation there is invasion of the anterior rectal wall as well as the mesorectal fascia this tumor is classified as T3 CRM +ve tumor. On the right with proper angulation perpendicular to the rectal wall at	51

the level of the tumor the anterior rectal wall and mesorectal fascia are free of tumor this tumor is classified as T2 CRM –ve tumor.	
Figure (28) Axial T2Wi & fat suppression show fat suppression is not helpful in delineating the tumor.	51
Figure (29) Sex percentage in the study.	54
Figure (30) Number of patients diagnosed by MRI in relation to pathology in each T stage.	55
Figure (31) Number of patients diagnosed by MRI in relation to pathology in each N stage.	56
Figure (32) Number of patients diagnosed by MRI in relation to pathology in CRM whether +ve or –ve.	57
Figure (33) Case (1) Mid rectal T3N1 tumor with CRM –ve.	59
Figure (34) Case (2) Low rectal T2N1 tumor with CRM –ve.	60
Figure (35) Case (3) Anorectal T4N3 tumor.	61
Figure (36) Case (4) Mid rectal T2N0 tumor with CRM –ve.	62
Figure (37) Case (5) Low rectal T3N1 tumor with CRM –ve.	63
Figure (38) Case (6) Low rectal T3N2 tumor with CRM +ve.	64
Figure (39) Case (7) Low rectal T3N0 tumor with CRM –ve.	65

Figure (40) Case (8) Low rectal T2N0 tumor with CRM –ve.	66
Figure (41) Case (9) Low rectal T2N0 tumor with CRM –ve.	67
Figure (42) Case (10) Mid rectal T2N0 tumor with CRM –ve.	68

List of tables

Table number and title	Page No
Table (1) Illustration of modified duke's staging.	19
Table (2) Illustration of TNM staging.	21
Table (3) Comparison between TNM & Dukes staging systems.	22
Table (4) Illustration of T-stage of rectal cancer.	36
Table (5) Illustration of N-stage of rectal cancer.	42
Table (6) Illustration of risk of nodal metastasis in relation to T-stage.	42
Table (7) Illustration of positive nodal deposits in relation to lymph node size.	43
Table (8) Number of patients diagnosed by MRI in relation to pathology in each T, N stages& CRM as well as agreement%& total agreement% in each title.	57

Introduction

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Aim Of Work

Introduction

Colorectal cancer is the third most common cancer worldwide. Around 30-40% of colorectal cancers are located in the rectum, accounting for 5% of malignant tumors, and ranking as the fifth most common cancer in adults. ***Murray T.et al. (2005).***

Rectal cancer is defined as a tumor whose distal margin measured with the rigid rectoscope is 16 cm or less from the anocutaneous line.

The prognosis of rectal cancer is influenced by several factors, such as local tumor extent, involved lymph nodes, and the presence of distant metastases. Among these, the presence and extent of extramural tumor spread influence both long-term survival and the risk of local recurrence. With the more widespread acceptance of neoadjuvant concepts, there is an increasing need for preoperative imaging methods to aid adequate management because treatment strategies need to be individualized according to the depth of tumor invasion and the status of the regional lymph nodes, while previously patients were considered for surgery without undergoing preoperative cross-sectional pelvic imaging. Accurate preoperative assessment is an important first step in assigning patients to one of the available treatment strategies. ***Jemal A. et al. (2005).***

Aim of the work

To assess the agreement between MRI as a non-invasive diagnostic tool and postoperative histopathological examination in local staging (T and N stages) of rectal carcinoma as well as the mesorectal fascia involvement which represent the circumferential resection margin.

Abstract

Rectal cancer is a common malignancy. Success of tumor excision depends on accurate staging& appropriate surgical technique. Phased-array surface coil magnetic resonance imaging is used to determine which patients can be treated with surgery alone and which will require neoadjuvant therapy& proved useful in the relationship between tumor and the mesorectal fascia (the circumferential resection margin) at total mesorectal excision.

keyword:FDG-PET/CT-CRC-PET/CT

Review Of Literature