MRI STAGING OF ENDOMETRIAL AND CERVICAL CARCINOMA

Thesis
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Abstract

MRI is an ideal non-invasive technique and superior to other imaging modalities in the evaluation of pelvic abnormalities. MRI tells us the exact volume, shape, and direction of the primary lesion, local extent of the disease, and nodal status accurately, which helps the clinician in treatment planning.

Aim of Work

To detect the impact of Magnetic resonance imaging in preoperative staging of endometrial and cervical carcinomas ,with special focus on: Evaluation of sensitivity of Magnetic resonance imaging staging , with cyto-histological diagnosis taken as the reference.

Patient and Methods

The study included 50 cases (28 cases with endometrial carcinoma and 22 cases with cervical carcinoma) who performed dynamic contrast enhanced MRI for pre-operative staging. The patients' age ranged between (29 and 83 years) with a mean age of 50 years. They presented with abnormal uterine bleeding, post menopausal bleeding and/ or vaginal discharge. MRI results were compared with the histopathology results.

Results:

The calculated sensitivity, specificity, overall accuracy, positive and negative predictive values of MRI in staging of endometrial cancinoma were 96%, 67%,92%, 96 % and 66% respectively.

The calculated sensitivity, overall accuracy and positive predictive value of MRI in staging of Cervical carcinoma was 100 %, 91%, 91% respectively.

Conclusion:

MRI imaging with its superior soft-tissue resolution is the single best modality for the preoperative staging of uterine carcinomas. It helps to decide operability, the type of operation and aids in the selection of patients who need a special referral to a gynecologist oncologist.

Keywords:

MRI-CT-AGC-HPV- SERM

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List of Abbreviations

ADC	Apparent Diffusion Co-efficient
AGC	Atypical Glandular Cells
AIS	Adenocarcinoma In Situ
AUB	Abnormal Uterine Bleeding
CIN	Cervical Intraepithelial Neoplasia
CIS	Carcinoma In Situ
CT	Computed Tomography
DES	Diethylstilbestrol
DW	Diffusion-Weighted
EESs	Endometrial Stromal Sarcomas
EIN	Endometrial Intraepithelial Neoplasia
ET	Endometrial Thickness (ET)
Fat-sat	Fat Suppression
FIESTA	Axial Fast Imaging Employing Steady-state Acquisition
FIGO	Federation of Obstetrics and Gynecology (FIGO)
FSE	Fast Spin Echo
HCG	Human Chorionic Gonadotrophin
HNPCC	Hereditary Nonpolyposis Colorectal Cancer
HPV	Human Papilloma Virus
HRT	Hormone Replacement Therapy
JZ	Junctional Zone
LAVA	Liver Acquisition Volume Acceleration
LEEP	Loop Electrosurgical Excision Procedure

LMSs	Leiomyosarcomas
LN	Lymph Node
MMR	Mismatch Repair
MRI	Magnetic Resonance Imaging
PaP	Papanicolaou (pap) Smears
PCOS	Polycystic Ovary Syndrome
PMP	Postmenopausal Bleeding
RARE	Rapid Acquisition with Relaxation Enhancement
SCC	Squamous Cell Carcinoma
SCJ	Squamocolumnar Junction
SERM	Selective Estrogen Receptor Modulator
SIL	Sequamous Intraepithelial Lesion
TNM	Tumour, Nodes, Metastasis
TVS	Transvaginal Ultrasound
TVU	Transvaginal Ultrasound (TVU))
UICC	The International Union Against Cancer (UICC)

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