

Introduction

Endometrial Pathology is a prevalent gynecological disorder which include Many diseases as Endometrial Hyperplasia, Endometrial polyps and Endometrial Cancer. Endometrial Cancer which is a prevalent disorder has Many risk factors as exposure to endogenous or exogenous estrogen, obesity, tamoxifen therapy, hypertension or diabetes. The Most accurate diagnostic Method for any endometrial pathology is Endometrial sampling. But, Transvaginal Ultrasound is The First step for assessment of post-menopausal bleeding showing that if the endometrial thickness is 4 mm or less has more than 99% negative predictive value for cancer. MRI and CT were needed for evaluation of disease staging and lymph node metastasis. The IETA guidelines has aimed to standardize terms, definitions and measurement techniques for ultrasound and color doppler assessment of any pathology of the endometrium and uterine cavity.

IETA ultrasound characteristics simple scoring method was done. CT and MRI were done when indicated. All specimens were subjected to histopathologic examination. Then the IETA score and histological Result of each pathology were compared to assess The IETA accuracy.

Aim of the Work

The aim of this work was to determine the role of ultrasound in assesment of any endometrial pathology to distinguish between the different pathological entities in order to plan for proper management.

Patients and Methods

Patients with Endometrial pathology or symptoms suggest abnormal endometrial pattern from January 2021 to June 2022. This patients subjected to history taking, complaints, present history general and local examination. Imaging by transvaginal Ultrasound was done for all patients. according to International Endometrial Tuomor Analysis (IETA) criteria.

Results

Table 1: Distribution of studied sample according to Histopathology findings.

Histopathology findings	Number	Percent
Benign	90	73.2
Malignant	31	25.2
Unknown	2	1.6
Total	123	100

Table 1 Histopathology findings of the studied group and it show that 90 (73.2%) were benign, 31 (25.2%) were malignant and 2 (1.6%) were unknown.

Table 2: Relation between Histopathology findings and ultrasound IETA score.

IETA score	Histopathology findings			H	P value
	Benign	Malignant	Unknown		
Range	1-13	4-18	7-9	47.538	<0.001*
Mean±S.D.	5.12±2.016	11.71±4.244	8.00±1.414		
P ₁		<0.001*	0.039*		
P ₂			0.043*		

H: Kruskal-Wallis test

P₁: Comparison between benign and other groups

P₂: comparison between malignant and unknown

Table 2 shows Relation between Histopathology findings and ultrasound IETA score and it show highly statistically significant increase in IETA score in malignant patients when it compares with benign patients.

Table 3: ROC curve analysis of IETA score to predicted malignant.

	Cutt off value	Sensitivity	Specificity	PPV	NPV	AUC	P value
IETA score	>7	80.60	91.10	73.5	93.1	0.902	<0.001*

Table 3 show ROC curve analysis of IETA score to predicted malignant and it show that at cut off value of >7 with sensitivity of 80.60% and specificity of 91.10% and AUC of 0.902 with P value <0.001 it can predicted malignant patients.

Conclusion

Our findings demonstrate a significant correlation between IETA scores and different endometrial pathologies, with higher scores indicating more severe pathology. Notably, the strong association between elevated IETA scores and the presence of malignancy confirms the diagnostic value of the IETA scoring system.