#### A COMPARATIVE STUDY BETWEEN THE TRANSVAGINAL ULTRASOUND AND LAPAROSCOPE IN DETECTING THE PREVALENCE OF DEEP INFILTRATING ENDOMETRIOSIS IN CASES OF OVARIAN ENDOMETRIOSIS

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## Introduction

Endometriosis is defined also as the presence of ectopic endometrial tissue (glands and stroma) outside the lining of the uterine cavity, which induces a chronic inflammatory reaction, scar tissue, and adhesions that may distort a woman's pelvic anatomy.

Endometriosis has several theory to explain its pathology also has several symptoms and signs for diagnosis .different ways for diagnosis as ultrasound, chemical marker and laparoscope.

### Aim of the work

The aim of the presented study was to compare between the accuracy of the transvaginal ultrasound and laparoscope in the diagnosis of deep infiltrating endometriosis in cases of ovarian endometriosis (ovarian chocolate cyst) and to detect the prevalence of deep infiltrating endometriosis in cases of ovarian endometriosis.

# Subjects and Methods

**PATIENTS:** This prospective cohort study was conducted on 40 patients with ovarian endometrioma diagnosed by ultrasonography at Shatby university hospital who were admitted in order to perform ovarian chocolate cystectomy, via laparoscopy.

They underwent transvaginal ultrasonographic examination, and laparoscopy.

METHODS: All 40 cases were subjected to detailed history detailed Pelvic examination, Systematic Transvaginal ultrasound of pelvis according to recommendation of the IDEA group and laparoscope to diagnose DIE.

### Results

Regarding transvaginal ultrasound finding it was found that all cases had ovarian endometriosis, posterior compartment affection was prevalent than the anterior compartment and DIE prevalence was about 15% of the collected cases. obliteration of D.P was seen in 32.5% by U/S, DIE was seen in 15% of cases and these included 7.5% in rectovaginal septum and 5% in the uterosacral ligament.

Regarding laparoscopic findings it was found that The common area of affection in ovarian endometriotic cases is tubal adhesion resemble about 37.5% of cases and douglus pouch obliteration resemble about 32.5% of cases while DIE prevalence was about 22.5% of the collected cases.

there is a good agreement in the diagnosis of deep infiltrating endometriosis between TV U/S and laparoscopy.

**Table 1:** Distribution of the studied cases of endometrioma according to DIE (n = 40)

DIE	laparoscopic data		Ultrasound data		
	No.	%	No.	%	
Absent	31	77.5	34	85.0	
Present	9	22.5	6	15.0	

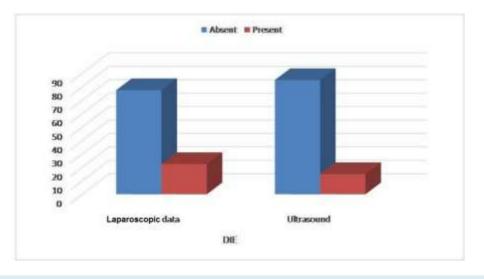


Table 2: Distribution of the studied cases of endometrioma according to suspection of DIE by laparoscope and ultrasound (n = 40)

DIE	laparoscopic data		Ultrasound data	
	No.	%	No.	%
Bladder endometriosis	0	0.0	0	0.0
Rectovaginal space endometriosis	9	22.5	3	7.5
uterovesicule pouch obliteration	2	5.0	1	2.5
<b>Uterosacral ligmentendometiosis</b>	2	5.0	2	5
Peritoneal endometriosis	12	30	-	-
Intestinal ,colon endometriosis	0	0	-	-
Uretric endometriosis	0	0	-	-

### Conclusion

- The results of our study concluded that the TVS can be used as the first investigative tool in the diagnostic work up for patients with suspected endometriosis.
- It also shared that there is a good agreement in the diagnosis of deep infiltrating endometriosis between TV U/S and laparoscopy.
- The study indicated that about 15-22.5 % of cases with ovarian endometriosis had DIE in different locations and thus it is recommended that once an ovarian endometriosis is detected all efforts should be done to exclude the presence of DIE in these patients.



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