

ROLE OF ULTRASOUND IN ASSESSMENT OF SMOOTH MUSCLE TUMORS OF UTERUS

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Introduction

Smooth muscle tumors (SMTs) are the most common mesenchymal tumors of the uterus. The majority of the uterine SMTs are classified as benign or malignant.

Uterine leiomyoma (fibroids) are the most common benign tumors of smooth muscle, originating from the myometrium. The prevalence of fibroids varies among different studies and countries (4.5%–68.6%) based on the type of investigation, method of diagnosis, and racial / ethnic demographics of the population studied.

Leiomyosarcoma (LMS) is rare. However, it is the most common uterine sarcomas with a high risk of recurrence and death.

Uterine smooth muscle tumors of unknown malignant potential (STUMP) are neoplasms with pathological features.

In our study we used ultrasound as a diagnostic tool to distinguish between different pathological lesions before surgery and compare it to histopathology after excision of the lesion.

Aim of the work

The aim of the current study was to evaluate the role of ultrasound in assesment of uterine smooth muscle tumors to distinguish between the different pathological entities in order to plan for proper management.

Patients and Methods

Female patients will be recruited to the study from January 2021 to June 2022. Cases will be selected from those admitted to Shatby Maternity University hospital.

Prospective and retrospective observational descriptive study.

Study procedure: we will collect data which was recorded in shatby gynecology unit from January 2021 to june 2022 about: histories which were taken and recorded in a special data entery sheet. Full descriptipn of the lesion. General and pelvic examinations. The results of histopathological are compared to ultrasound diagnosis.

Results

Table: Relation Between Ultrasound Findings and Histopathological Results.

Ultrasound results	Histopathological results		Leiomyo -sarcoma N=8	Fisher-Freeman -Halton Exact Test	P value
	Leiomyoma N=110	STUMP N=2			
Leiomyoma n=112	106(94.6%)	0(0%)	6(5.4%)	39.854	<0.001**
Leiomyosarcoma n=4	3(75%)	0(0%)	1(25%)		
STUMP n=1	0(0%)	1(100%)	0(0%)		
Leiomyoma or Ovarian tumor n=1	1(100%)	0(0%)	0(0%)		
Leiomyoma or Leiomyosarcoma n=1	0(0%)	1(100%)	0(0%)		
Leiomyoma or stump n=1	0(0%)	0(0%)	1(100%)		

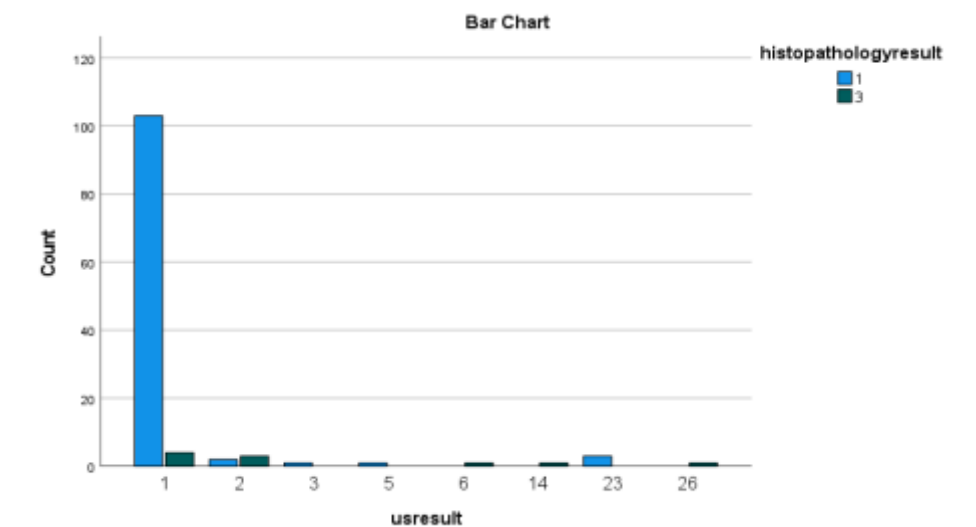


Figure: Relation Between Ultrasound Findings and Histopathological Results.

Conclusion

- According to the finding in the current study, ultrasound successfully distinguished between Leiomyoma and STUMP as well as Leiomyosarcoma showing the highest sensitivity and PPV in case of Leiomyoma while the lowest sensitivity and PPV in case of Leiomyosarcoma.
- Therefore, ultrasound may be a useful tool in proper management of uterine smooth muscle tumors by distinguishing between the different pathological entities.