PREVALENCE OF ADNEXAL MASSES IN CHILD, ADOLESCENT AND REPRODUCTIVE AGE FEMALES IN EL-SHATBI GYNEONCOLOGY SPECIALIZED CENTER

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Introduction

An adnexal mass is an abnormal growth that develops near the uterus, most commonly arising from the ovaries, fallopian tubes, or connective tissues. The lump-like mass can be cystic or solid. Adnexal masses may occur at any age, although they are more typically seen in women of reproductive age.

Adnexal masses are characterized on ultrasonography as cystic, solid, or complex. According to an American College of Radiology guideline, simple cysts in premenopausal women are considered benign.

In children and adolescents adnexal masses are uncommon, with the incidence of neoplastic masses being estimated at 2.6 per 100,000 girls each year. Several retrospective studies have been published with patient numbers varying from 20 to over 500 patients. These populations mostly represent single center series and present heterogenic distributions of the different histological subtypes with malignancy rates differing widely.

Aim of the work

To evaluate the varies presentations of adnexal mass in child, adolescent and reproductive age female groups. To differentiate into benign and malignant adnexal mass. Detection and evaluation of adnexal mass by using different diagnostic methods including risk of malignancy index.

Patients and Methods

Study setting:
The study had been conducted in El-Shatbi Gynecology Specialized Center, from the period of jan 2016 till dec 2018.
Type of study and study population: This retrospective study
Inclusion Criteria for study group:
- All child, adolescent, reproductive age female
- All adnexal mass of >6cm whether benign or malignant. Solid or cystic.
Exclusion Criteria for groups:
- Adnexal mass <6cm with clear fluid cyst.
- Non-Gynecological origin Adnexal mass.
- Poly cystic ovarian syndrome.
- Age>45 years.

Methods
Complete history taking.
Examination:
- General examination.
- Abdominal and local clinical examination.
- Bimanual pelvic examination of both adnexa, and uterus.
- Investigations.
- Routine Trans vaginal examination.

Results

Table 1: Profile of patient by age and pathological finding

Pathological diagnosis	benign	%	malignant	%	borderline	%	total
Age							
<18	8	1.53	14	2.69	17	3.27	38
18-30	160	30.76	22	4.23	19	3.65	202
30-45	130	25.00	41	7.88	54	10.38	225
total	298	57.31	77	14.81	90	17.31	465

Table 2: Comparison between the IOTA finding, pathology and MRI

	IOTA		Pathology		MRI	
Benign	320	61.45%	298	57.31	312	60.00
Malignant	98	18.85%	77	14.81	118	22.69

Conclusion

- The most frequent malignant pathological diagnosis in patients <18 years was dysgerminoma and yolk sac tumor, while in age group 18-30 the most common diagnosis was juvenile granulosa cell tumor, in age group 30-45 the most common diagnosis was serous adenocarcinoma.

- The most common benign tumor in patients <18 years was teratoma, while in age group 18-30 was simple ovarian cyst followed by hemorrhagic cyst, and in age group 30-45 simple ovarian cyst followed by endometriotic cyst was the commonest in this age.

- Transvaginal ultrasound is the preferred modality for initial evaluation due to its ease of availability, low cost, good anatomical detail, high negative predictive value with sensitivities and specificities 77.78%, and 93.41% respectively, for detection of malignant ovarian masses.

- MRI can help in differentiation benign and malignant mass.

- Pathology remains the most accurate module in differentiation benign and malignant mass.