Study of ovaries and polycystic ovaries

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Abstract:

The terminology (PCOS) is express as polycystic ovary syndrome which is common gynecological diseases with both young and old women, with high rates. This disease negatively impacts fertility and can even lead to infertility. In this context, Dr. Wael Al-Banna, a gynecology and obstetrics consultant, notes that ovarian cysts are a very common gynecological disease, and the incidence of this disease varies from country to country, but the overall incidence ranges from 5-10%. The gynecology and obstetrics consultant continues that diagnosing this disease is not difficult at present, given significant advances in medical science. However, the most accurate diagnosis is through ultrasound, i.e., abdominal or vaginal ultrasound. Vaginal examination is preferred for women due to its 100% accuracy. The gynecology and obstetrics consultant adds that the common form of ovarian cysts is small, pearl-shaped cysts, ranging in number from 10-12. This causes ovarian enlargement.

To understanding of polycystic ovary syndrome (PCOS), associated metabolic disorders, and diagnosis in women of reproductive age, including adolescents. This study aims to define what ovaries are, study polycystic ovaries, and how they are treated, prevented, and diagnosed by ultrasound. This method represents the real ability to recognize the sonographic features of a real gynecological ultrasound diagnoses.

Introduction:

As a result of the rapid development of human structure and the interference of negative   environment and external factors that affected many emergency cases which have become prevalent in modern societies. These were accompanied by transient pathological phenomena, some of which became comprehensive and a specific group suffered from them. General gynecological diseases, especially those that have recently appeared and are related to gynecological diseases. One of these

diseases is inflammation of the hydatid cysts and ovarian cysts in their known types. Rapid developments in the diagnostic field of these conditions, especially uterine granulomas and hydatid cysts, have contributed to the treatment and surgical removal of specific cases. There are cases where abnormal development of external or internal ovarian cysts may occur. Early diagnosis is necessary to determine whether cancer cells have been detected in these cases. Several diagnostic methods are available, including surgery, biopsy, or the use of medical technology such as diagnostic radiology or ultrasound.

The two figures shown in Radnah clearly illustrate the difference in the presence or absence of ovarian involvement in normal or altered ovaries as a result of the injury, which may be diagnosed somewhat late.
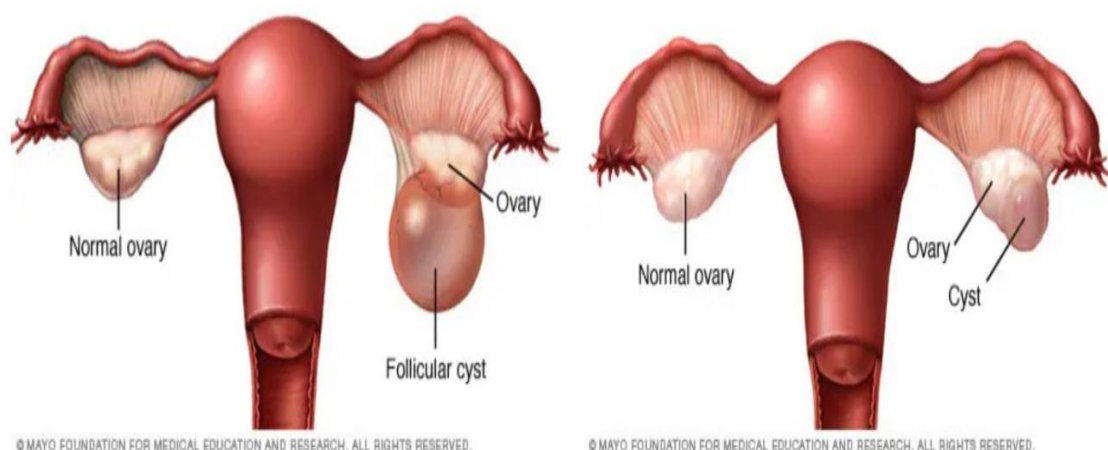
Pathophysiology of PCOS:

Polycystic ovary Polycystic ovary syndrome (PCOS) is very complex syndrome, mysterious, and common condition. PCOS is the high common type of endocrine perturbations in the women of reproductive age, affecting up to one of five women.1 Women often experience amenorrhea, hirsutism, and obesity, diabetes, high blood pressure, and disorder of lipid.

Clinical Manifestations:

256

The Most of the patients when exposure to the ovarian cysts are asymptomatic, as the cysts are appears incidentally by an ultrasound and by Ct examination. However, some of many cysts may be accompanied by a ranging of symptoms,

severe, by the

Lower abdominal pains , Irregularity of menstrual periods , Lower abdominal pain during menstruation , Pressure in the pelvis and Pelvic pain appear with be accompanied with sexual intercourse or may be with strenuous exercise .

TABLE 1. polycystic ovary syndrome Diagnostics.

At the year 1990 (NICHD)9

Required for diagnosis

A.   Hyperandrogenism and the other hyperandrogenemia

B.   Oligo-anovulation

At the year 2003 Rotterdam Criteria10 (minimum of 2 of 3 approaches criteria needed for all diagnosis).

A. Clinical or by the biochemical hyperandrogenism

B. Low ovulation

C. Polycystic Ovary Syndrome 2006 Androgen Excess - Association for Polycystic Ovary Syndrome (AE-PCOS) Standards 11 (both criteria required for all diagnoses)

Diagnosis:

Polycystic ovary syndrome (PCOS) disease, so the patients are classified along a clinical spectrumes. Therefore, it has historically. Three previous attempts were made for classifying the diagnose as shown in table 1. At 1990, (NICHD) which represents the main approaches for diagnosing PCOS were: (1) hyperandrogenemia (2) irregularities of Menstruation.

 (3) exception for other endocrine disorders.9.In 2003, the Society of European (ESHRE) and the Society of American (ASRM) put a joint conferences , Netherlands. This led to "Rotterdam Standards," concluding that the diagnosis of the PCOS must contains two or three approaches :

A- Ovulation deficiency standard,

B- clinical or biochemical evidence

C-The Ultrasound techniques for ovaries .

257

TABLE 2.

Women with suspected PCOS are referred for hormone testing..

Hyperandrogenism:

Total and the free testosterone

DHEA-S

Ovulation dysfunction: Progesterone cycle day 22-24 AMHExcluding similar disorders:

TSH

Prolactin

17-OHP

Oral GTT

Polycystic ovary syndrome (PCOS) is a complex, 38/5,000 Lipid panel 24-hour urinary free cortisol.

Endometrial of biopsy:

Persistent or prolonged infrequent menopause, along with hyperinsulinemia, increases risks of the endometrial hyperplasia and cancer with respect to the women with PCOS, especially of the presence of obesity. Therefore, endometrial tissue evaluation using the endometrial biopsy and be considered for the women with a long time history untreated infrequent menopause, especially for the state of increasing endometrial thickness is observed by the ultrasound.

Common Associated Abnormalities:

Multiple parameters of PCOS, affecting multiple body systems. Insulin acts on fat cells, skeletal, cardiac muscles to stimulate glucose uptake, and inhibits hepatocyte, the resistance Insulin is the decreased ability of the insulin to exert the physiological affectless, resulting in increasing circulating insulin levels in response to a load of glucose . Along with insulin, reduces sex hormone-binding globin, which is turn increases Free androgens lead to the appearance of excess hair..

To explain the big normal ovary for a woman after break menstrual cycle

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A- Median 1x1x2 cm

Median volume 1 ml

range: from 0.4 to 4 ml

144 asymptomatic women after break menstrual cycle 45 to 64 years' old

Abdominal scan

1-Low frequency

2-Poor resolution

3- Good overview. Abdominal examination. Full bladder.
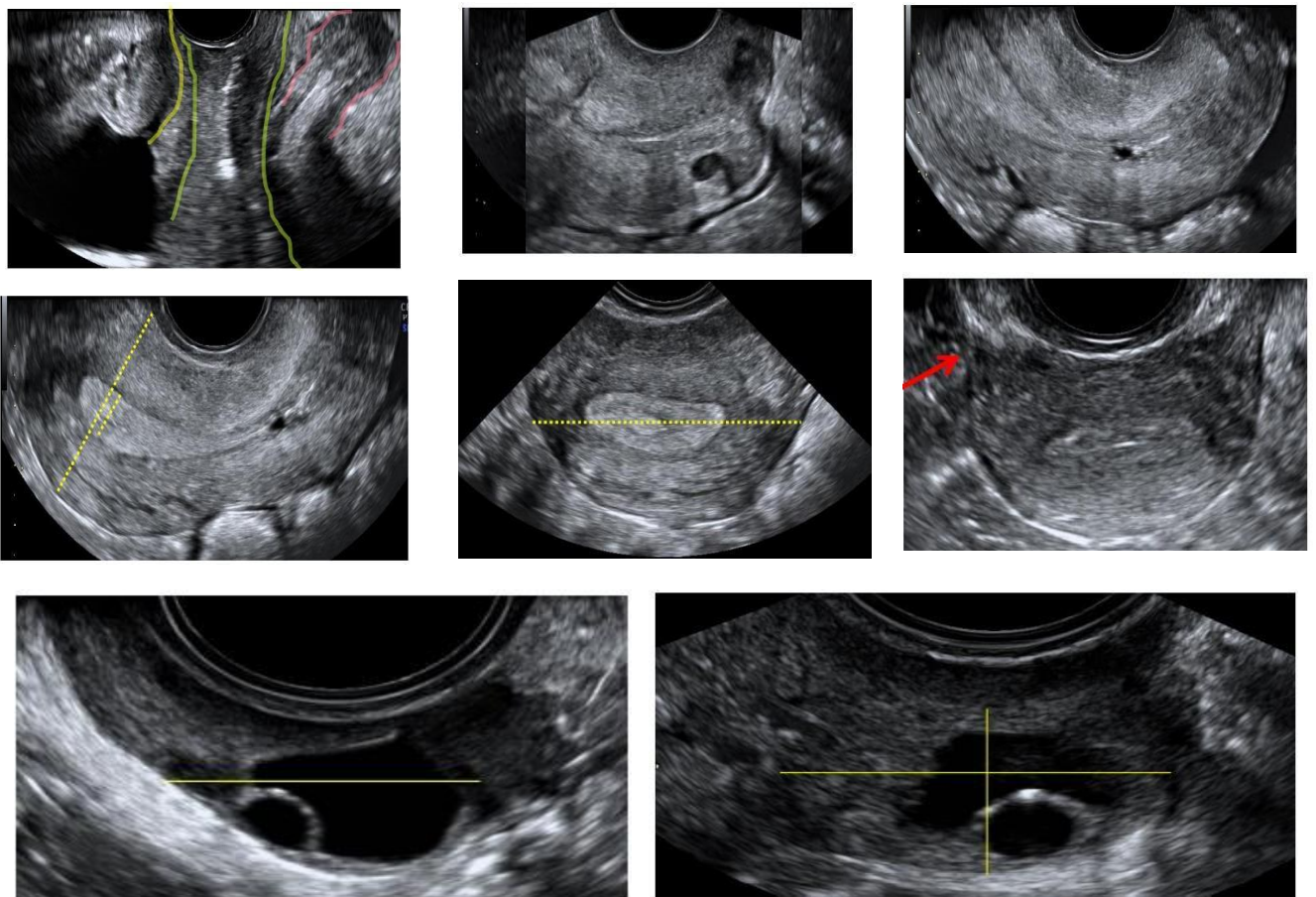
257

Vaginal (rectal) Exam.

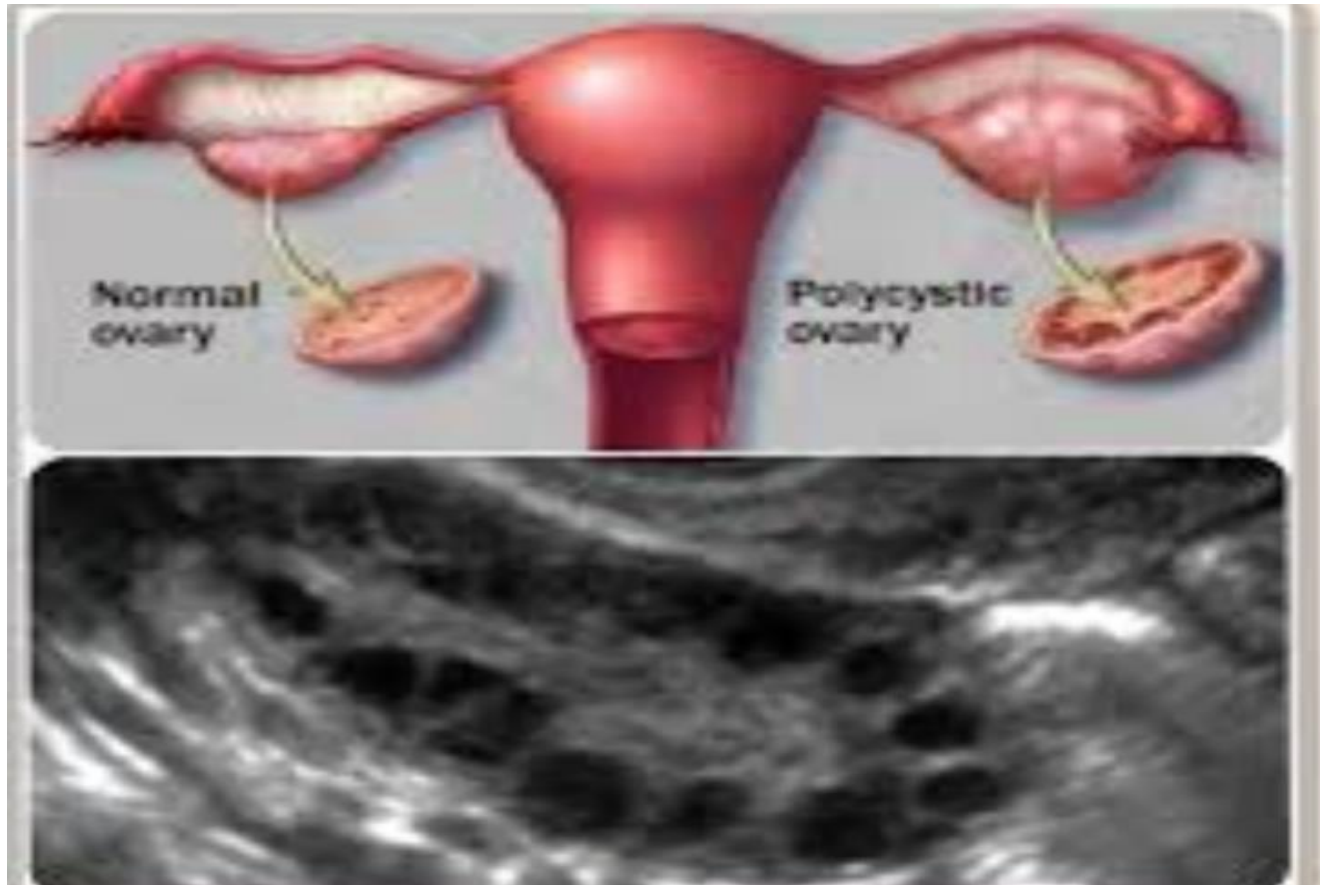High frequency, excellent resolution, blurred vision, invisible abdomen and

empty bladder

The techniques of the ultrasound for General curriculum

Scanning of Vaginal

 and technique have the like methods as the previous maners.

257

Conclusions:

Primary ovarian cysts are normal and may disappear completely over time, over several cycles. The risk of developing cancer increases statistically with age for women. CA-125 can be measured to distinguish between benign and malignant ovarian tumors in these cases. The risk of developing ovarian cysts is sometimes more apparent after menopause. Laparoscopy is recommended for benign tumors. Surgery is preferable to remove tumors that may be malignant if the diagnosis is uncertain.

The Women with findings suggestive of better chance of survival when the patient is promptly referred to a urologist.

To prevent polycystic ovaries Maintaining medicines and the therapist's instructions. healthy food. sports. Complete checks for cholesterol, blood pressure and sugar. Avoid smoking

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257

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