POLYCYSTIC OVARY SYNDROME IN DUHOK: CLINICAL AND BIOCHEMICAL CHARACTERIZATION

KHALIDA JAMAL MUHYADIN, MBCHB *
QAYSER SAHIB HABEEB, MBCHB, DM, MSC**
IMAN YOUSIF ADBULMALEK, MBCHB, FIBMS***

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ABSTRACT

Background: Polycystic ovary syndrome is a complex, heterogeneous disorder that affects 5-10 % of women in their reproductive age, causing a range of reproductive, metabolic, and endocrine defects characterized by chronic anovulation, hyperandrogenism, and polycystic ovaries. It manifests differently depending on many interacting factors, including environmental exposures, genetics, and lifestyle.

Objectives: This study aimed to assess the clinical and biochemical findings of local cases of the syndrome.

Methods: This cross-sectional study was carried out during the period from 01 June to 01 December 2019, at Duhok Azadi teaching hospital and the outpatient departments of Zakho maternity hospital and Kurdistan medical complex. The 108 eligible patients according to Rotterdam ESHRE/ASRM criteria were interviewed and examined by the investigator to find out and document the required data following the adopted questionnaire, which included patient's history, clinical examination, laboratory investigation, and abdominal ultrasound. The statistical package SPSS version 19 was used to analyze study variables. The statistical analyses used were *Chi*-square, Mann-Whitney test, and Unpaired *t*-test.

Results: The mean age of the enrolled women was 24.3 ± 5.54, the majority (81.5%) was below 30 years old and (70.6%) were overweight, (50.9%) were unmarried, and (68.5%) were having secondary school/college educational levels with (51.9%) giving the family history of PCOS. Menstrual cycle disturbances were detected in (97.2%) and infertility history (27.8%). The most common finding was hirsutism (86.1%), followed by generalized alopecia (62%). Polycystic ovaries were detected in (75.3%) on U/S examination.

Conclusions: In local practice, menstrual abnormalities, mostly as hypomenorrhea and oligomenorrhea, constituted the most common presentation. On the other hand, the concurrent presence of hyperandrogenism and positive ultrasound findings were more stable features and may be suggested as a better indicator for establishing the diagnosis of the syndrome locally.

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Keywords: Hirsutism, Hyperandrogenism, Menstrual cycle disturbances, Polycystic ovary syndrome.

The polycystic ovary syndrome (PCOS) is the most common endocrinopathy in women who are at reproductive age, and it is associated with ovarian dysfunction and metabolic disorders[1]. PCOS is a multifactorial disorder, but the exact mechanisms for its development are still not clear. It is the major cause of anovulatory infertility and increases the risk of insulin resistance, obesity, cardiovascular disease, and psychosocial disorders[2,3].

* *Master Studetn, Dep. of Community & Family Medicine, College of Medicine, University of Duhok, Kurdistan Region-Iraq.*
** *Professor, Department of Comm. & Fam. Medicine, College of Medicine, University of Duhok,Kurdistan Region-Iraq.*
*** *Prof., Department of the Obstetrics & Gynecology, College of Medicine, University of Duhok, Kurdistan Region, Iraq.*
orresponding Author Khalida Jamal Muhyadi, jkhalida@hotmail.com, , Mobil +964 750 428 3198

The 2003 Rotterdam ESHRE/ASRM-sponsored PCOS consensus workshop group concluded that no single diagnostic criterion was sufficient for a clinical diagnosis of PCOS. Two out of three criteria have to be met to fit the definition: chronic anovulation or infrequent menstrual cycles, clinical and/or biochemical hyperandrogenism, and polycystic ovaries[4]. Although many women in Duhok city frequently report to the local consultation clinics complaining of some of these features, the researcher couldn't find any study that investigated the syndrome. This study was designed to define the clinical and biochemical characteristics of local cases of PCOS.

PATIENTS AND METHODS

This cross-sectional study was carried out during the period from 01 June to 01 December 2019, at Duhok Azadi teaching hospital in addition to the outpatient departments of Zakho maternity hospital and Kurdistan medical complex. The study included 108 patients who satisfied Rotterdam ESHRE/ASRM criteria. Exclusion criteria included hyper or hypothyroidism, hyperprolactinemia, Cushing syndrome, congenital adrenal hyperplasia, and androgen-secreting tumors. After a thorough explanation of the study objectives and requirements, informed consent was taken from each eligible patient. All women were directly interviewed by the investigator in accordance with the study questionnaire using the participant's language. The study questionnaire included demographics, obstetrical and medical history. This was followed by a meticulous clinical examination for hirsutism, acne, alopecia, and acanthosis nigricans. The weight of each participant was measured by an electronic scale (QF-2003A) bare footed ordinary wearing clothes, a wall-mounted measuring stadiometer measured the height to the nearest centimeter, converted into meters then squared and recorded, then the participant was sent to the laboratory of the hospital for determination of the required hormones (Testosterone hormone, Prolactin hormone, Thyroid-stimulating hormone (TSH), *Leutilizing* hormone and Follicular stimulation hormone as LH/FSH) using immunofluorescence assay by VIDAS technology. An abdominal U/S examination appointment was taken for each participant at the radiology department of each hospital. Competent radiologist/gynecologist did the U/S examination in each center, and the reports were written in accordance with the frame proposed in the study questionnaire. The polycystic ovary was defined as the presence of 12 or more follicles measuring 2-9mm in diameter in each ovary and/or ovarian volume > 10ml. The statistical package SPSS version 19 was used to analyze study variables. The statistical analyses used were *Chi*-square, Mann-Whitney test, and Unpaired t-test.

RESULTS

The mean age of the enrolled women was 24.3 ± 5.54, with a range of 15-39. The majority (81.5%) were below 30 years old. The most common causes of PCOS (35.2%) were 20-24 years old. As to their educational level (42.6%) were having secondary school education. Regarding the marital status (50.9%) were unmarried,

(47.2%) were married, while the remainder were widowed and divorced. The majority of women (79.6%) were nulliparas, more so in the younger age group (83.9 vs. 53.3). The overall mean parity was (0.4±0.96), and the difference between the two groups was highly significant. *P* = 0.003. As to the changes in the menstrual cycle (infrequent), (71.3%) of the enrolled women reported a history of oligomenorrhea followed by (25.9%) hypomenorrhea and (2.8%) with the normal menstrual cycle. Statistically, the differences between the two age groups were insignificant *P*-value > 0.05. More than one-quarter of the sample (27.8%) reported a history of infertility, (17.6%) primary and (10.2%) secondary. Primary infertility was more common among the younger age group (18.3% vs.13.3%), unlike secondary infertility, which was more common among the older age group (7.5% vs. 26.7%). The differences were statistically insignificant. *P*-value >0.05, table 1.

Table 1: Study Sample by Age and Obstetrical History.

Obstetrical History		Age (years)						
		15 – 30 (n = 93)		31 – 39 (n = 15)		P*	Total (n = 108)	
		No.	%	No.	%		No.	%
Parity	Nil	78	83.9	8	53.3	0.008	86	79.6
	1-5	15	16.1	7	46.7		22	20.4
	Mean ± SD	0.3 ± 0.69		1.3 ± 1.27		0.003	0.4 ± 0.96	
Family history of PCOS		47	50.5	9	60.0	0.496	56	51.9
Oligomenorrhea		66	71.0	11	73.3	1.000	77	71.3
Normal menstrual cycle		2	2.2	1	6.7	1.000	3	2.8
Hypomenorrhea		26	28.0	2	13.3	0.345	28	25.9
Infertility	Primary	17	18.3	2	13.3	0.088	19	17.6
	Secondary	7	7.5	4	26.7		11	10.2

*** Based on Fisher's exact test, except mean parity on Mann-Whitney test.**

The most common clinical finding was generalized alopecia (62.0%) followed by generalized and local hirsutism (44.4% and 41.7% resp.), Acne (19.4%) and Acanthosis (17.6%). None of the comparisons between the two main age groups proved statistically significant. *P*-value > 0.05. Most of the enrolled women were overweight, with the majority (70.6%) falling in the BMI range of 25 - <40.

Those falling in the normal range constituted only 28.7%. Age-wise, the younger and older groups didn't differ significantly across the different levels of BMI. p= 0.407, table 2.

Table 2: Clinical and U/S Findings by Age

Clinical Findings		Age (years) 15 – 30 (n = 93) No.	%	31 – 38 (n = 15) No.	%	P*	Total (n = 108) No.	%
Hirsutism	Generalized	41	44.1	7	46.7	0.678	48	44.4
	Local	40	43.0	5	33.3		45	41.7
Alopecia	Generalized	60	64.5	7	46.7	0.380	67	62.0
	Local	2	2.2	0	0.0		2	1.9
Acanthosis		16	17.2	3	20.0	0.725	19	17.6
Acne		20	21.5	1	6.7	0.294	21	19.4
BMI (kg/m2)	< 18.5	1	1.1	0	0.0		1	0.9
	18.5 - < 25	28	30.1	3	20.0		31	28.7
	25 - < 30	34	36.6	4	26.7	0.407	38	35.2
	30 - < 40	28	30.1	7	46.7		35	32.4
	≥ 40	2	2.2	1	6.7		3	2.8
Abdominal U/S Finding	Presence of ≥ 12 follicles (2-9 mm)	83	90.3	10	66.7	0.007	94	87.1
	Increased ovarian volume (> 10 ml)	81	86.1	10	66.7	0.013	91	84.2

*** Based on Fisher's exact test.**

The most commonly raised hormone was testosterone (21.3%), followed by prolactin (7.4%) and TSH (2.8%). Only (11.1%) exhibited an LH/FSH ratio of≥3.

Age wise, the younger and older groups did not differ significantly neither in hormone levels nor in the LH / FSH ratio. p >0.05, table 3.

Table 3: Biochemical Findingsby Age

Biochemical Findings	Age (years) 15 – 30 (n= 93) No.	%	31 – 39 (n= 15) No.	%	P*	Total (n =108) No.	%
Testosterone >0.7 ng/ml	22	23.7	1	6.7	0.184	23	21.3
Prolactin >35 ng/ml	8	8.6	0	0.0	0.596	8	7.4
TSH > 5 mIU/l	2	2.2	1	6.7	0.364	3	2.8
LH/FSH ≥ 3	11	11.8	1	6.7	1.000	12	11.1

*** Based on Fisher's exact test.**

Different PCOS features, including hirsutism, cycle disturbance, BMI ≥ 25, and high testosterone level, were compared between patients with and without positive U/S findings; none of these comparisons achieved statistical significance. *P*-value > 0.05. The same applies to women with LH/ FSH ≥3, table 4.

Table 4: PCOS Features by U/S Findings.

PCOS Features	Positive U/S findings (n = 94)		Negative U/S findings (n = 14)		P*	Total (n = 108)	
	No.	%	No.	%		No.	%
Hirsutism	82	87.2	11	78.6	0.408	93	86.1
Cycle disturbance**	93	98.9	12	85.7	0.538	105	97.2
BMI 25 – 29	66	70.2	10	71.5	0.926	76	70.4
BMI ≥ 30	32	34.0	6	42.9	0.557	38	35.2
High testosterone	21	22.3	2	14.3	0.730	23	21.3
LH/FSH ≥ 3	9	9.6	3	21.4	0.187	12	11.1

*** All based on *Chi*-square test.**

**** Cycle disturbance or infrequent cycle (hypomenorrhea + oligomenorrhea)**

DISCUSSION

The most common endocrine disturbance in women of reproductive age is polycystic ovary syndrome. This syndrome is associated with hormonal, biochemical, and psychological consequences, resulting in reduced health-related quality of life[5,6].

1. Obstetrical History and Clinical Findings

The Prevalence of PCOS depends on the adopted diagnostic criteria. The WHO estimates that PCOS affected 116 million women worldwide as of 2010 (3.4% of the population)[7]. Most of the prevalence studies in India reported the Prevalence of PCOS as (9.13% to 36%)[8].

A family history of PCOS was documented in (51.9%) of women included in this study; such a finding disagrees with those revealed by a study done in India in which the incidence of PCOS among the study population was (21%). This difference may be due to some of the socio-economic factors like lifestyle, eating habits, and obesity[8].

PCOS is associated with a wide range of menstrual irregularities ranging from regular oligomenorrhea and hypomenorrhea; they represented about (97.2%) in this study. A study performed in Beijing/ China revealed that (92%) had abnormal menstrual cycle9. In another study, approximately (75-85%) of women with PCOS had clinically evident menstrual dysfunction[10].

Regarding infertility, more than one-quarter of the sample (27.8%) presented with a history of infertility. However, the overall Prevalence of infertility could be higher since (50.9%) of the enrolled women were unmarried; moreover, the married PCOS women are usually under the gynecologist care because of their initial concern of infertility. A study performed in Libya revealed that (40%) had a history of infertility[11].

In this study, the most common clinical finding was generalized alopecia (62.0%). An earlier study done by Quinn *et al.* reported (22%) prevalence of alopecia in their study population, which is around one-third of the local figure. This may be due to the possibility of a confounding diagnosis such as age-related female-pattern hair loss[12].

The hirsutism, (86.1%) were having hirsutism in this study, which is a little lower than the findings of an earlier study done in Libya, which revealed that (91%) had hirsutism[11]. This same study revealed that only 12% of patients had acne, in contrast to about 25% reported worldwide. The age factor is playing an important role in this difference[13].

Obesity is less common in PCOS women of Mediterranean descent but more common in Hispanic, black, and white women with PCOS[14]. This study revealed the overweight effect (67.6%) with a BMI range of 25-<40. This high rate of overweight may indirectly reflect the high prevalence of overweight in our community in general. An earlier study by Najem in Libya revealed that the overweight was (81%) with the BMI range 24-<40, and obesity affecting 57% of Libyan PCOS patients[11].

The relation between obesity and PCOS is supported by the fact that a lifestyle change and control of weight will decrease PCOS symptoms and correct the hormonal imbalance. Two studies in India concluded that obesity increases the risk of PCOS to a lesser degree; it was seen that 40% of the overweight women suffered from PCOS[15,16], and the same result (43%) in a study at a tertiary health care hospital in Western Maharashtra by Shinde, et al., (2019)[17].

In this study, the most common U/S finding was the bilateral presence of ≥12 follicles (2-9mm) (87.1%) followed by bilateral increased ovarian volume (>10m) (84.2%). In an earlier study in Libya, the percentage of ultrasonography features of polycystic ovaries was (74%) close to the finding in the current study[11]. It is well known that trans-abdominal U/S is less sensitive than trans-vaginal U/S[18]. Both previous findings were much less than those reported by others (96.7%) who used transvaginal ultrasound. The underutilization of transvaginal ultrasound is due to cultural and religious restrictions in Muslim societies, and most of the women in this study were unmarried[14].

2. Biochemical Findings

The most common raised hormone in this study was testosterone (21.3%), which was a little lower than the finding in an earlier study in Libya which was (26%)[11]. The low rate of elevated testosterone in the study sample seems to be an underestimate to the actual rate of biochemical hyperandrogenism because the results depend on total serum testosterone assays rather than free testosterone assays according to availability issues[19].

The high frequency of hyperprolactinemia (31%) observed in Libian patients is worth investigating by using multiple sample measurements at a different time; this finding disagrees with the current study in which the prolactin level was mildly elevated in (7.4%) only. The LH/FSH ratio of ≥3 constituted (11%) compared to (16%) reported by a previous study in Lybia[11], this is an indicator for the low sensitivity of this test as a diagnostic tool in this context, but many researchers consider that about 30 % of women with PCOS had LH / FSH ratio ≥ 3:1, and this ratio is diagnostic for this syndrome[11].

CONCLUSIONS

In local practice, menstrual abnormalities, mostly as hypomenorrhea and oligomenorrhea, constituted the most common presentation. On the other hand,

the concurrent presence of hyperandrogenism and positive ultrasound findings were more stable features and may be suggested as a better indicator for establishing the diagnosis of the syndrome locally. A more extended study, including bigger sample size, is suggested to verify the conclusions of this study and detect a more valid characterization of PCOS's local pattern.

REFERENCES

1. Spritzer PM. Polycystic ovary syndrome: reviewing diagnosis and management of metabolic disturbances. Arq Bras Endocrinol Metabol. 2014; 58(2): 182-7.
2. Dhaded S, Dabshetty S.Role of circulation miRNA in patients suffering with polycystic ovary syndrome (PCOS). International Journal of Clinical Obstetrics and Gynaecology. 2018; 2(3): 92-95.
3. Zhang XZ, Pang YL, Wang X, Li YH. Computational characterization and identification of human polycystic ovary syndrome genes.Scientific reports. 2018; 8(1): 1-7.
4. Rotterdam ESHRE/ASRM. Sponsored PCOS Consensus Workshop Group. Revised 2003 consensus on diagnostic criteria and long term health risks related to polycystic ovary syndrome (PCOS). Human reproduction. 2004; 19(1): 41-47.
5. Jamil AS, Alalaf SK, Al-Tawil NG, Al-Shawaf T. Comparison of clinical and hormonal characteristics among four phenotypes of polycystic ovary syndrome based on the Rotterdam criteria. 2016; 293: 447-56.
6. Moghadam ZB, Fereidooni B, Saffari M, Montazeri A. Measures of health-related quality of life in PCOS women: a systematic review. Int J Women's Health. 2018; 10: 397.
7. Kabel AM., Alghubayshi AY. and Moharm, FM. The impact of polycystic ovarian syndrome, a potential risk factor to endometrial cancer, on the quality of sleep. Journal of Cancer Research and Treatment. 2016; 4(6):96-8.
8. Joshi B, Mukherjee S, Patil A, Purandare A, Chauhan S, Vaidya R. A cross-sectional study of polycystic ovarian syndrome among adolescent and young girls in Mumbai, India. Indian J EndocrinolMetab. 2014; 18(3): 317-34.
9. Rong L, Zhang Q,Yang D, Li S, Lu S, Wu X, et al. Prevalence of polycystic ovary syndrome in women in China: a large community-based study. Human reproduction. 2013; 28(9): 2562-9.
10. Azziz R, Carmina E, Dewailly D, Diamanti-Kandarakis E, Escobar-Morreale HF, Futterweit W, et al. The Androgen Excess and PCOS Society criteria for the polycystic ovary syndrome: the complete task force report. Fertility and sterility. 2009; 91(2): 456-88.
11. Najem FI, Elmehdawi RR. Swalem AM. Clinical and biochemical characteristics of polycystic ovary syndrome in Benghazi-Libya; a retrospective study. Libyan J Med. 2008; 3(2): 71-4.
12. Quinn M., Shinkai K, Pasch L, Kuzmich L, Cedars M, Huddleston H. Prevalence of androgenic alopecia in patients with polycystic ovary

syndrome and characterization of associated clinical and biochemical features. Fertil Steril. 2014; 101(4): 1129-34.

13. Li L, Yang D, Chen X, Chen Y, Feng S, Wang L. Clinical and metabolic features of polycystic ovary syndrome. International Journal of Gynecology & Obstetrics. 2007; 97 (2): 129-34.
14. Wolf WM, Wattick RA, Kinkade ON, Olfert D. Geographical prevalence of polycystic ovary syndrome as determined by region and race/ethnicity. International journal of environmental research and public health. 2018; 15(11): 2589.
15. Choudhary A, Jain S, Chaudhari P. Prevalence and symptomatology of polycystic ovarian syndrome in Indian women: is there a rising incidence. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2017; 6(11): 4971-75.
16. Bharathi RV, Swetha S, Neerajaa J, Madhavica JV, Janani DM, Rekha SN, et al. An epidemiological survey: Effect of predisposing factors for PCOS in Indian urban and rural population. Middle East Fertility Society Journal. 2017; 22(4): 313-6.
17. Shinde KS, Patil SS. Incidence and risk factors of polycystic ovary syndrome among women in reproductive age group attending a tertiary health care hospital in western Maharashtra. International journal of Reproduction, Obstetrics and Gynecology. 2019; 8(7): 2804-09.
18. Balen AH, Laven JS, Tan SL, Dewailly D. Ultrasound assessment of the polycystic ovary: international consensus definitions. Human reproduction update. 2003; 9(6): 505-14.
19. Iwasa T, Matsuzaki T, Minakuchi M, Tanaka N, Shimizu , Hirata Y, et al. Diagnostic performance of serum total testosterone for Japanese patients with polycystic ovary syndrome. Endocr J. 2007; 54(2):233–38.

پوختە

متلازمة تكيس المبيض في دهوك
تحديد الخصائص السريرية والكيميائية

پێشەکی

(متلازمة المبيض المتعدد الكيسات) لڤینەکا ئالوز و نەرێك و پێکە کارتێکرنێ دکەتە سەر 5-10٪ ژ ئافرەتان ل ژیێ زاروك بوونێ، ئەڤە ژی دبیتە ئەگەرێ دەرکەفتنا کێما سیێن دویندەهیێ و هێکا و غودێ و نەزوکیێ و خراب بوونا ئەندروجینی و قەلەوی و خراب بوونا ئەنسولینی و زێدەبوونا مەترسیا تو شبوونا ژ جورێ DM2 و نەخو شیێن دلی و دەمارێن خوینێ. دیارکرنا ئەگەر و گرێیێن لوجستی ژ سەربورا دوماهیێ لدەف مروڤی بو دەستنیشانکرنا ئەگەرێ.

ئارمانج

دە ستنیشانکرنا سالوخەتێن تەختی و کیمیایی بێن زیندی و جڤاکی و دیموگرافی یە بو نەخو شێن (متلازمة المبيض المتعدد الكيسات) ل دهوکێ. و بەراوردکرنا ئان ڤان ئەنجامان دگەل هەمان وان زانیاریێن هاتینە کومکرن ل دەڤەرێن دی.

ئەنجام

ئەنجام ناڤە ئافرەتێن گرێدای 5.54+24.3 دناڤبەرا 15–39. و زوربەیا وان (81.5٪) خار ژیێ 30 سالیێ بوون. حالەتێن پتر بەرەبلاڤ ژ ڤێ نەخوشیێ (35.2٪) دناڤبەرا ژیێ 20 و 24 سالییدا بوون. ئاستێ فێربوونا خاندنا ناڤنجی و زانکویێ گەهشتە (68.5٪) و (50.9٪) کچ بوون. و خێزانێن مێژوویا ڤێ نەخو شیێ لدەف وان هەی (51.9٪) بوون. بتنێ (2.8٪) ژ وان چارە سەرییێن دلی و نەخو شیێن دوم درێژ بکار دئینان. نە رێك و پێکیا خولا هەیڤانە لدەف (97.2٪) ژ وانا هەبوو و (27.8٪) ژ وان مێژوویا نەزوکیێ هەبوو. ئەنجامێ تەختی یێ هەرە بەربەلاڤ (معممة والشعرانية المحلية) بوون ب رێژا (86.1٪) و لدویڤدا می وەریان ب رێژا (62.0٪) و (21.3٪) ئاستێ هورمونێ تستستیرون لدەف وان یێ بلند بوو.

دەرئەنجام

ڤەکولینەکا پارچەیی یە، پشکدار و رێك: ئەڤ ڤەکولینا لبەرچاڤ هاتە کرن ل نەخوشخانا دهوك ئازادی یا فێرکرنێ پشکا کلینیکێن ژدەرڤە بو نەخو شیێن ئافرەت و زاروك بوونێ و پ شکا کلینیکێن ژدەرڤە بو نەخو شیێن ئافرەت و زاروك بوونێ ل نەخو شخانا زاخو یا ئافرەت و زاروك بوونێ و کومەلگەها نوژداری ل زاخو، ل هەرێما کوردستانا عێراقێ، د ماوەیێ ژ مەها تەموز تا کانونا ئێکێ یا سالا 2019. لسەر بنیاتێ مێژوویا نەخو شی و مێژوویا نوژداری و مێژوویا نەخو شیێن ئافرەتا و پ شکنینا تەختی و پ شکنینا تاقیگەهیێ و هەلسەنگاندنا تیشکی (پێلێن سەر و دەنگی)، هەڤدیتن و پشکنینا 108 نەخوشان هاتە کرن ژلایێ ڤەکولەرێ ڤە بو زانین و پشت راستکرنا زانیاریێن ژێ هاتینە داخواز کرن لدویڤ پرسیار نامە باوەر پێکری.

الخلاصة

متلازمة تكيس المبيض في دهوك
تحديد الخصائص السريرية والكيميائية

خلفية البحث

ان متلازمة تكيس المبيضي اضطراب معقد وغير متجانس يصيب 5-10٪ من النساء في سن الإنجاب، مما يتسبب في مجموعة من عيوب الانجاب والأيض والغدد الصماء التي تتميز بعدمالأباضة المزمنة، وفرط الأندروجينية وتكيس المبيض. تتجلى المتلازمة با شكال مختلفة اعتمادًا على العديد من العوامل المتفاعلة، بما في ذلك التعرض البيئي، وعوامل الوراثة ، وأسلوب الحياة. تهدف هذه الدراسة إلى تحديد صفات المتلازمة لدى النساء في دهوك.

المرضى وطرق البحث

تم إجراء هذه الدراسة المقطعية خلال الفترة من يونيو إلى ديسمبر 2019، في مستشفى آزادي التعليمي/ دهوك، بالإضافة إلى أقسام العيادات الخارجية في مستشفى زاخو للولادة ومجمع كردستان الطبي. قام الباحث بإجراء مقابلات مع 108 مرضى مؤهلين وفقًا لمعايير روتردام ESHRE / ASRM لفحص وتوثيق البيانات المطلوبة وفقًا للاستبيان المعتمد الذي تضمن التاريخ المرضي والفحص السريري والفحص المختبري والموجات فوق الصوتية للبطن. تم استخدام الحزمة الإحصائية SPSSالإصدار 19 لتحليل متغيرات الدراسة وكانت الاختبارات الإحصائية المستخدمة هي: مربع Chi، واختبار-Man Whitney، وUnpaired t-test.

النتائج

كان متوسط عمر النساء 5.54 ± 24.3 والأغلبية دون 30 سنة مع زيادة عن المعدل المقبول للوزن، وكان (50.9%) غير متزوجات و(68.5%) لديهن مستويات تعليم ثانوي/ جامعي مع (51.9%) ممن لديهن تاريخ أسري للاصابة بالمتلازمة و(2.8) ممن لهن تاريخ مرضي يخص الامراض القلبية الوعائية والأيض واستخدام الأدوية المزمن. تم تثبيت اضطرابات الدورة الشهرية لدى (97.2%) والعقم في (27.8%) كما كانت العلامات الأكثر شيوعًا هي الشعرانية تليها الصلع واسع الانتشاروارتفاع مستوى التستوستيرون. تم الكشف عن تكيس المبيض في (75.3%) باستخدام فحص U/S وكان تكيس كلا المبيضين أكثر تواترا في الفئة العمرية الأصغر سناً.

الاستنتاجات

أغلبية النساء كان لديهن اضطرابات في الدورة الشهرية مثل نقص وشحة الطمث. من ناحية أخرى، كان الوجود المتزامن لفرط الأندروجينية ونتائج الموجات فوق الصوتية الإيجابية ميزات أكثر استقرارًا ويمكن اقتراحها كمؤشر أفضل لتحديد تشخيص المتلازمة محليًا.