# SANA RASHEED TAHA, MBCHB\* FARHAD KHORSHEED, MBCHB, CABS, FRCS\*\*

Submitted 4 July 2022; accepted 25 August 2022

### **ABSTRACT**

**Background:** Benign breast disorders are the most common abnormalities found in women as far as breast disease is concerned. The study's goal was to see if there is a link between serum dyslipidemia and benign breast diseases in women.

**Subjects and Methods:** This is a case-control study, that involved 70 patients with benign breast diseases (cyclical mastalgia, fibrocystic breast disease and fibroadenoma) and 70 control healthy women and all of them had been selected randomly, aged (20-45 years) in a period between 1st September. 2021- 30th June. 2022. It is hospital-based study, The patients' group was carried out at the breast clinic at Azadi teaching hospital, while healthy participants in control group had been recruited in this study from different places in Duhok city such as governmental institutions, camps and universities with matching ages.

**Results:** The mean age of patients and control groups was 33.5±7.6 and 33.1±6.5 respectively. Fibrocystic breast disease constitutes 40 % of patients with benign breast diseases, while 38 % of them had cyclical mastalgia and only 21% had fibroadenoma. Seventy-Eight percent of patients had a normal lipid profiles and it is also normal in 80 % of a control group (P value less than <0.8). There was a significant difference in total cholesterol and VLDL between patients and control groups (P value less than <0.004 and 0.0005 consequently). Regarding the relationship of a lipid profile to the different etiologies of benign breast diseases, all parameters were not significant between different groups except for LDL and VLDL, as it was significant when we compare fibroadenoma to fibrocystic breast diseases with the P-value of 0.0001 and 0.0002 consequently. Also, when we compare fibroadenoma and cyclical mastalgia, there was a significant difference between LDL and VLDL with P values of 0.0001 and 0.01consequently.

**Conclusion:** There is a clear association between benign breast diseases and some parameters of lipid profile such as total cholesterol and VLDL. We do recommend measuring lipid profiles in these groups of patients especially those with fibroadenoma

Duhok Med J 2022; 16 (2): 46-54

**Keywords:** Benign Breast Diseases, Cyclical Mastalgia, Dyslipidemia, Fibroadenoma, Fibrocystic Disease.

The breast is a dynamic organ that goes through cyclical changes<sup>1</sup>. One of the most complicated endocrine organs is the mammary gland. Developmental abnormalities, inflammatory lesions, epithelial and stromal proliferations all fall under the umbrella of benign breast disorders. The great majority of lesions found in the breast are harmless (benign)

diseases<sup>2</sup>. It affects around 25% of all asymptomatic women. A fibroadenoma is a benign lump that is painless, solid, firm and rubbery. It is most common in women between the ages of 14 and 35, but it can affect anyone at any age. The exact cause of fibroadenoma is unknown, but experts believe that is caused by the female reproductive hormone (estrogen).

<sup>\*-</sup>Department of Oncology, Azadi teaching hospital, Duhok, Kurdistan Region, Iraq-

<sup>\*\*</sup> Assist Professor, Department of Surgery, College of Medicine, University of Duhok, Kurdistan Region, Iraq. Correspondence author: Dr.Sana Rashee, <a href="mailto:sana.sqery@gmail.com">sana.sqery@gmail.com</a>, +9647504089579

The evaluation of fibroadenoma is by history and physical examination... Physically, it is characterized by some features such as non-painful or non-tender mobile mass, rubbery substance and regular borders. For further assessment diagnostic mammography is needed for imaging, which has some characteristic features such as a well-circumscribed discrete oval mass hypodense or isodense of breast glandular tissue. On ultrasound fibroadenoma appears a wellas circumscribed, spherical to oval, macrolobulated mass with homogeneous hypoechogenicity. In some situations, may need FNAC/tru-cut biopsy<sup>3</sup>. The majority of fibroadenoma do not require treatment, but if their size is excessive and they may squeeze other breast tissues, they should be excised. While Rapid growth, a size more than 3 cm, and a patient request are all indications for surgical intervention<sup>4</sup>. Fibrocystic disease (FBD) is caused by an overreaction of breast tissue to cyclical hormonal fluctuations, and it is more common in the third to fifth decades of life<sup>5</sup>. Experts estimate that roughly 90% of women have some form of fibrocystic alteration during their reproductive years <sup>6</sup>. The etiology of FBD and mastalgia is based on some apparent associations with endocrine and other variables or processes such as variation in the level of estrogen and progesterone<sup>7</sup>. Change in Prolactin levels has shown high levels in cases with FBD<sup>8</sup>. From a pathological point of view, FBD affects the terminal duct lobular unit (TDLU)<sup>9</sup> · Breast tenderness or mastalgia, as well as a lump, are common symptoms of FBD. Another distinguishing feature is diffuse nodularity with multiple, movable (cystic dilatations) that compressible<sup>5</sup>. The diagnosis of fibrocystic breast disease is usually based on clinical

evidence. The essential clinical signs to diagnose the disease are cyclical breast discomfort, nodularity, lumpiness with fluctuating lump sizes, the multiplicity of lesions, and bilateral involvement. Ultrasonography (USG), mammography, and fine needle aspiration cytology (FNAC) may use to confirm the diagnosis in dubious cases <sup>10-11</sup>.

Cyclical mastalgia, during their reproductive life almost two-thirds of women, experience cyclical mastalgia. Although it is usually harmless, worry of underlying breast cancer has become one of the most common reasons for seeking medical advice. This type of pain usually affects both breasts. The pain is normally the worst just before a menstrual cycle, and it subsides once the period is over <sup>12</sup>. Mastalgia is linked to premenstrual syndrome (PMS), fibrocystic breast illness, psychologic distress, and, in rare cases, breast cancer. A clinical assessment can reassure the vast majority of women. Evaluation is done by history and clinical examination. First-line treatments include mechanical breast support, a low-fat, highcarbohydrate diet, and topical nonsteroidal anti-inflammatory medications. Bromocriptine, tamoxifen, and danazol are hormonal medications that have shown success in the treatment of mastalgia <sup>13</sup>.

Recently many researches have been conducted on the relationship between benign breast illnesses and lipid profile, because lipid contents are an essential substance in the cell membrane for a variety of biological tasks, including cell development and division in both normal and malignant tissues. Several researchers have investigated the effectiveness of variations in tissue/blood cholesterol levels in the diagnosis and treatment of various disorders and even malignancies <sup>1</sup>. The

incidence of benign breast illnesses is higher in countries with a higher fat intake, particularly fat from animal sources such as meat and dairy products. Fat intake has been linked to an increased risk of proliferative benign breast disorders, particularly atypical hyperplasia, in numerous studies<sup>14</sup>.

#### PATIENTS AND METHODS

This is a case-control study that involved (70) patients with benign breast diseases (cyclical mastalgia, fibrocystic breast disease, and fibroadenoma), and 70 of control healthy women and all of them are selected randomly. The consent was taken from all patients who attended the Breast Clinic in Azadi teaching hospital, while healthy participants in the control group were recruited in this study from different places in Duhok city such as governmental institutions, camps, and universities with matching ages (20-45 years) in a period between 1st September. 2021- 30th June. 2022. A 5 ml of blood aspirated from both control and patient groups has been sent for serum lipid profile after 12 hours of fasting. The lipid profile included total cholesterol, triglyceride, LDL, VLDL, HDL and Non-HDL. BMI was also recorded in both groups. The cases that were suffering from benign breast diseases will be diagnosed by clinical examination, imaging, and histopathology whenever it's clinically indicated. Both control and patients group should have no medical history of certain diseases which may alter serum lipid profile such as (Type 2diabetes, hepatocellular disease, chronic renal failure, hypothyroidism, familial hyperlipidemia, polycystic ovarian syndrome...etc.), with no history of smoking, alcohol intake and certain drugs

such as (Diuretics, Glucocorticoids, Ciclosporins, Androgen,B blockers and Retinoids).

Dyslipidemia cut points based of American association clinical endocrinologists (AACE) guidelines which include; total cholesterol is considered high when it's  $\geq 200$  mg/dl, HDL cholesterol: is considered dyslipidemic when it's < 40 mg/dl in males and < 50mg/dl in females. LDL -cholesterol: is considered high when it's > 130mg/dl, Triglyceride: is considered high when it's ≥ 150 mg/dl. Lastly for Non-HDL which is total cholesterol minus HDL is considered high when it's >130 mg/dl for both men and women<sup>15</sup>.

#### STATISTICAL ANALYSES

For statistical analyses regarding the categorical data, frequencies and percentages are used, whereas for continuous data, mean and standard deviation are being used. The Chi-square test is being used to examine the relationships between the variables, with p-values of less than or equal to 0.05 considered significant. The Statistical Package for Social Sciences is being used to examine the data (SPSS 25 IBM: USA). **RESULTS** 

#### Fibrocystic breast disease constitutes 40 % of patients with benign breast diseases, while 38 % of them had fibroadenoma and only 21% had cyclical mastalgia (table 1). Seventy-Eight percent of patients had normal lipid profiles and it's also normal in 80 % of the control group (P value less <0.8). Almost one-third than of participants in both groups were overweight and 13 % of them were obese (see table 1). The mean age of subjects in

the patients' group and control groups was

 $33.5\pm7.6$  and  $33.1\pm6.5$  respectively (table 2).

Table (1): Showing the general characteristics of the participants.

Parameters	Patients N (%)	Controls N (%)	<i>p</i> -value
Complain			
fibroadenoma	27(38.6%)		
fibrocystic	28(40.0%)		
disease	15(21.4%)		
cyclical mastalgia			
Lipid Profile			
Normal	55(78.6%)	56(80.0%)	0.8
Isolated HyperTG	7(10.0%)	9(12.9%)	0.5
Isolated	5(7.1%)	4(5.7%)	0.7
hyperCho	3(4.3%)	1(1.4%)	0.3
Combined			
Dyslipidemia			
BMI			
<25	23(32.9%)	20(28.6%)	0.6
25-30	32(45.7%)	30(42.9%)	0.7
30-35	12(17.1%)	14(20.0%)	0.6
35-40	2(2.9%)	5(7.1%)	0.2
>40		1(1.4%)	
Non-HDL			
Normal	50(71.4%)	53(75.7%)	0.5
Elevated	20(28.6%)	17(24.3%)	0.5

There was a significant difference in total cholesterol and VLDL between patients and control groups (P value less than < 0.004 0.0005 and consequently). However this was not the case for other parameters in lipid profile as there was no significant difference between both groups (table 2). significant Also, there was no difference regarding subclassification of lipid profile such isolated as hypercholetrolemia, isolated hypertriglcerdemia, combined and dyslipidemia (figure 1).

Table 2: Lipid between patients and controls

Parameters	Patients mean±SD	Controls mean±SD	<i>p</i> -value
Age	33.5±7.6	33.1±6.5	0.7
Total			
cholesterol	170.1±31.1	163.8±31.1	0.004
LDL			
	100.7±27.5	$94.0\pm26.9$	0.1
HDL	54.5±11.7	51.1±13.8	0.2
TG	94.3±41.9	106.8±59.6	0.1
VLDL	15.8±6.1	21.5±12.0	0.0005
Non-HDL	115.6±31.7	112.7±28.6	0.5

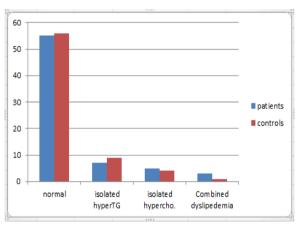


Figure1: Lipids profile normal and abnormal between patients and controls

Regarding the relationship of a lipid profile to the different etiologies of benign breast diseases, all parameters were insignificant between different groups (table 3), however when we compare fibroadenoma to fibrocystic breast disease there was a significant difference between both groups regarding LDL and VLDL with P and 0.0002 value of 0.0001 consequently (table 4). Also when we compare fibroadenoma and cyclical significant mastalgia, there was

difference between LDL and VLDL with P values of 0.0001 and 0.01 consequently (table 5), meanwhile, when we compare fibrocystic and cyclical mastalgia there was no significant difference regarding all lipid parameters (table 6).

Table 3: The classification of lipid profile According to the etiology of benign breast disease (BBD)

Etiolo- gy of BBD	Normal Lipid Profile	Isol- ated Hyper TG	Isolated Hyperch	Com bined Dysli pede mia	Total
Fibro- adenom	24	1	2	0	27
a Fibro- cystic disease	21	3	3	1	28
Cyclical mastalgi a	10	3	0	2	15
Total	55	7	5	3	70

Table 4: Comparison between fibroadenoma and fibrocystic disease of the breast

and not ocystic disease of the oreast			
	Fibro- adenoma	Fibrocystic disease	<i>p</i> -value
	N=27	N=28	
	mean±SD	mean±SD	
Total	161.2±31.	177.1±28.0	0.05
cholester	0		
ol			
LDL	192.3±32.	$106.3\pm20.6$	< 0.0001
	0		
HDL	$54.7 \pm 10.1$	55.3±11.8	0.8
TG	80.4±34.6	101.3±36.9	0.03
VLDL	$12.8\pm4.1$	17.5±4.5	0.0002
Non-	106.5±31.	121.8±26.9	0.05
HDL	1		

Table 5: Comparison between fibroadenoma and cyclical mastalgia

	Fibroaden oma N=27 mean±SD	Cyclical mastalgia N=15 mean±SD	<i>p</i> -value
Total	161.2±31.0	173.1±35.0	0.2
holesterol LDL	192.3±32.0	105.8±27.9	<0.000
HDL	54.7±10.1	52.6±14.5	0.5
TG	80.4±34.6	105.9±56.5	0.07
VLDL	12.8±4.1	18.1±9.2	0.01
Non-HDL	106.5±31.1	120.5±38.8	0.2

Table 6: Comparison between fibrocystic breast disease and cyclical mastalgia

	Fibrocystic disease N=28 mean±SD	Cyclical mastalgia N=15 mean±SD	<i>p</i> -value
Total	177.1±28.0	173.1±35.0	0.6
cholesterol			
LDL	$106.3\pm20.6$	105.8±27.9	0.9
HDL	55.3±11.8	52.6±14.5	0.5
TG	101.3±36.9	105.9±56.5	0.7
VLDL	17.5±4.5	18.1±9.2	0.7
Non-HDL	121.8±26.9	120.5±38.8	0.8

# **DISCUSSION**

This study is the first to look for an association between serum lipid profile and benign breast diseases in the Kurdistan region, Iraq. Our result shows a significant association between benign breast diseases and total cholesterol along with VLDL, while there was no association between benign breast diseases and triglycerides, HDL, and NON-HDL. In a study carried out from June 2018 to November 2018 in the department of general surgery at Medical College in Chennai, India, which included 75 cases aged between 16-35 years, had been chosen randomly who had benign breast disorders of one of three fibroadenoma., categories, fibrocystic breast disease and mastalgia. In that study revealed serum LDL cholesterol levels in

patients with benign breast disease did not arise, however, serum triglyceride levels were high in 21.3 % of women with benign breast disease had increased serum triglyceride levels suggestive of hyperlipidemia<sup>16</sup>.

In another study, Gonenc et al. 2006, found that total cholesterol and HDL levels increased in patients with benign breast disease. He also found no increase in serum LDL cholesterol<sup>17</sup>. Khanna et al.2002 also found that all patients with benign breast disease had higher serum triglyceride levels than the control group<sup>18</sup>. Another study has been done in the department of biology, faculty of Science, Kufa University, Najaf, Iraq. This study involved 80 women divided into two groups: the control group which included 40 healthy women and the benign group which contained 40 women with benign breast tumors aged between 20-60 years, The results clarify a significant P< 0.05 increase in the levels of cholesterol, highdensity lipoprotein HDL and triglycerides TG in women in the benign group in compared with healthy women although the LDL level was similar 19 but our result shows no association between isolated hypertriglcerdemia and benign breast diseases.

When it comes to subtypes of benign breast diseases there was a strong association of fibroadenoma, LDL, and VLDL. Meanwhile, there was association of other benign breast diseases such as fibrocystic and mastalgia to any parameters of lipid profile. There is similar study had been done in India from August 2012 to July 2014 they selected 50 cases and they diagnosed randomly with different benign breast lesions like fibroadenoma, breast abscess, mastalgia and fibrocystic disease with 30 control

cases. That study revealed total cholesterol and HDL level and triglyceride were significantly higher than controls<sup>20</sup>.

#### **CONCLUSION**

As far as there is an association between benign breast diseases and parameters of lipid profile such as total cholesterol and VLDL, we do recommend measuring lipid profile in these groups of patients especially those with fibroadema, however more researches are needed in this field especially to look for the impact lipid lowering therapy on improvement of such conditions.

#### **ACKNOWLEDGEMENTS**

We would like to thank Dr. Kajeen Rashid for helping me with statistics.

# **CONFLICT OF INTEREST**

The authors declared that they have no conflict of interest

#### REFERENCES

- 1. Gerber M, Richardson S, Crastes de Paulet P, Pujol H, Crastes de Paulet A. Relationship between vitamin E and polyunsaturated fatty acids in breast cancer. Nutritional and metabolic aspects. Cancer. 1989;64:2347–53.
- Caleffi M, Filho DD, Borghetti K. Cryoablation of benign breast tumors: evolution of technique and technology. Breast. 2004;13:397–407.
- 3. Namazi A, Adibi A, Haghighi M, Hashemi M. An Evaluation of Ultrasound Features of Breast Fibroadenoma. Adv Biomed Res. 2017;6:153
- 4. Krings G, Bean GR, Chen YY. Fibroepithelial lesions; The WHO spectrum. Semin Diagn Pathol. 2017 Sep;34(5):438-452.

- Sandadi S, Rock DT, Orr JW Jr., Valea FA. Breast diseases: detection, management and surveillance of breast diseases. In: Lobo RA, Gershenson DM, Lentz GM, Valea FA, editors. Comprehensive gynaecology. 7th ed. Philadelphia: Elsevier; 2017. p. 294-328.
- 6. Meisner ALW, Fekrazad MH, Royce ME. Med Clin N Am, 2008; 92:1115-1141.
- 7. Andrews WC. J Reprod Med, 1990; 35 Suppl 1:87- 90.
- 8. Courtillot C, Plu-Bureau G, Binart N, Balleyguier C,et al. J Mammary Gland Biol Neoplasia, 2005; 10:325-335.
- 9. Rosai J. Rosai and Ackerman's surgical pathology. Volume 2. 9th ed. Missouri: Mosby; 2004. p. 177- 178.
- 10. Khanna,S.; Singh, S.; Khanna,H.D.; et al. Evaluation of Estradiol Levels, Lipid Profile, Estrogen Receptor Status and it Correlation with Histological Variants in Benign Breast Diseases. (2012). World J. Pathol.1:10-13.
- 11. Vorherr H. Fibrocystic breast disease: pathophysiology, pathomorphology, clinical picture, and management. Am J Obstet Gynecol. 1986 Jan;154(1):161-79. doi: 10.1016/0002-9378(86)90421-7. PMID: 3511705.
- 12. D.N. Ader, J. South-Paul, T. Adera, P.A. Deuster, Cyclical mastalgia: prevalence and associated health and behavioral factors. J Psychosom Obstet Gynaecol, 22 (2) (2001), pp. 71-76.
- 13. J. Iddon, J.M. Dixon Mastalgia ,BMJ, 347 (2013), p. f3288.

- 14. Pfeifer JD, Barr RJ, Wick MR. Ectopic breast tissue and breast-like sweat Gland metaplasias: an overlapping spectrum of lesions. J Cutan Pathol. 1999;26:190–6.
- 15. Jellinger PS, Handelsman Y, Rosenblit PD, al. American et association of clinical endocrinologists and american college of endocrinology guidelines for management of dyslipidemia and prevention of cardiovascular disease. Endocr Pract. 2017;23(Suppl 2):1-87. doi:10.4158/EP171764.APPGL
- 16. Prabakar MS, Prakasam N, Reshma S, Loganathan K, Palani V. A clinical study of serum lipid profile in benign breast disease in a tertiary care hospital. Int Surg J 2019;6:3162-4
- 17. Gonenc A, Erten D, Aslan S, Akinci M, Simsek B, Torun M. Lipid peroxidation and antioxidant status in blood and tissue of malignant breast tumor and benign breast disease. J Int Cell Biol. 2006;30:376-80
- 18. Khanna AK, Tapadar JK, Khanna HD, Khanna S, Khanna A. Behavior of estrogen receptor, histological correlation and clinical outcome in patients with benign breast disorder. Eur J Surg. 2002;168:631-4.
- 19. Shaymaa, Mhammed, Alkhalifa, Jenan. Study the role of lipid profile in the incidence of benign breast tumors in the women year. International Journal of Scientific & Engineering Research, Volume 6, Issue 11, November-2015. 356 ISSN 2229-5518.
- 20. Susil R, Bhupati Das, Sushanta Das; et al. Study of the lipid profile in patients having benign breast disease. Journal of evidence based medicine and healthcare. 2015; 2(14):2218-2227.

# يوخته

# نەخۆشىيە بيھۆشىكەرەكانى مەمك لە باوترين نەخۆشىيەكانى ژنانن.

ئامانج: لهم تویز ینهوهیه دوزینهوهی پهیوهندییه له نیوان بهرز ریزهی چهوری له خویندا و روودانی ههندیک نهخوشی بیهوشکه که کاریگهری لهسه مهمک ههیه.

بابهتهکان و شیوازهکان: ئهمه تویزینهوهیهکی کهیس-کونتروله که لهسهر ۱٤۰ ژن ئهنجامدراوه، ۷۰ نهخوش که نهخوشیه بیهوشهکانی مهمکیان ههیه (پیشالی گهده، نهخوشی پیشالی کیسی مهمک و ئازاری وهرزی مهمک) بهراورد دهکرین له بهراورد دهکرین له به ۷۰ ژن که له پرووی کلینیکیهوه تهندروستن و ئهم دوو گروپه هاوتا دهکرین له پرووی تهمهنهوه، له نیوان ۲۰۲ بی و ۱ سالدایه، تویزینهوهکه له ماوهی ۱ی ئهیلوولی ۲۰۲۱ تا ۳۱ی حوزهیرانی ۲۰۲۲ ئهنجامدراوه، تویزینهوهکه له نیزکاری ئازادی / دو هوک ئهنجامدراوه، لهکاتیکدا حالهتی تهندروست له ناوهنده جیاوازهکانی حکومهت کوکراونه و دامهزراوه و کولینژ و کهمیهکان.

دەرەنجامەكان: مامناوەندى تەمەن بۆ ھەردوو گروپەكە بەر يۆككەوت 7.6  $\pm$  33.5 و 6.5  $\pm$  1.80 بووە، نەخۆشى لەگەل نەخۆشى ريشالى كىسى نزيكەى 40% پيكدەھنننت و ريشالى گەدە بە نزيكەى 38% مەزەندە دەكريت، لەكىتىكدا ئازارى خولىي لە مەمكدا تەنھا نزيكەى 21% پيكدەھننت. لە سەدا حەفتا و ھەشتى ئەو ژنانەى كە نەخۆشى كاتيكدا ئازارى خولىي ئە دەكريت ئەسلام بەخۆشى كىلىنىكەرى مەمكىان ھەبووە و لە سەدا ھەشتا لە نەخۆشە تەندروستەكانى كلىنىكى ئاستى كۆلىسترۆليان ئاسلىي بووە بېھۆشكەرى مەمكىان ھەبووە و لە سەدا ھەشتا لە ئەخۆشەكاندا زياتىر بوو لە گروپى تەندروست لە رووى كلىنىكىەوە بە بەھاى ئە نيوان دوو گروپدا، كە رېزەكە لە نەخۆشەكاندا زياتىر بوو لە گروپى تەندروست لە رووى كلىنىكىەوە بە بەھاى ئەگەرى كەمتىر لە كەرەر و رۇون لە رېككەوت. سەبارەت بە پەيوەندى نيوان كۆلىسترۆل و ھۆكارە جىلوازەكانى نەخۆشىيە بېھۆشەكانى مەمك، ھىچ جىلوازىيەك لە پيوانەكاندا نەبووە جگە لە چەورى پرۆتىنى چرپى نزم جىلوازەكالى و چەورى پرۆتىنى چرپى نزم (LDL) و چەورى پرۆتىنى چرپى زۆر نزم (VLDL)، كە ئاسىتەكانىان بەرز بووە لە ژنانى تووشبوو بە رېشالى گەدە كە يەھاي ئەگەرى كەمتىر لە 2000، و 0.0001 و 0.0001 بەريەككەوت.

دەرەنجامهكان: بەپنى تونزينەوەكە پەيوەندىيەك ھەيە لە ننوان ئەو ژنانەى كە نەخۆشىيە بنهۆشەكانى مەمكيان ھەيە و جياوازى ھەيە لە پزرەى كۆى كۆلىسترۆل و چەورى پرۆتىنى چرى زۆر نزم (VLDL) ھەروەھا ئەم تونزينەوەيە دەرىخستووە بەرزبوونەوەى ئاستى چەورى پرۆتىنى چرىى نزم (LDL) و چەورى پرۆتىنى چرىى زۆر نزم (VLDL) لە ژنانى تووشبوو بە رىشالى گەدە، بۆيە پنشنيار دەكەين ئاستى چەورى بۆ ئەو خانمانە بېنورنىت كە بەدەست نەخۆشىيە لە ژنانى تووشبوو بە رىشالى گەدە، بەلام... لەم تونزينەوەيەدا پنويستە لايكۆلىنەوەى زياتر بەرنىت، ئەم بابەتە بۆ ئەوەيە كە لايكۆلىنەوە لە كارىگەرى چارەسەرى دابەزاندنى چەورى لەسەر باشتركردنى نىشانەكان و يارمەتىدانى چارەسەركردنىيان بكرنىت.

# الخلاصة

# عسر شحميات الدم وأمراض الثدي

الخلفية والأهداف: تعد الامراض الثدي الحميدة من اكثر الامراض شيوعا لدى النساء. الهدف من هذه الدراسة هي ايجاد علاقة بين ارتفاع نسبة الدهون في الدم والاصابة ببعض الامراض الحميدة التي تصيب الثدي.

المواضيع و طرق البحث: هذه دراسة تشمل الحالات و الشواهد التي اجريت على 140 امراة سيتم مقارنة 70 مريضة لديهن الامراض الحميدة في الثدي (الاورام الغدية الليفية,الامراض الكيسي الليفي في الثدي و الالم الدوري في الثدي) مع مجموعة من 70 امراة اصحاء سريريا و تتم مطابقة هاتين المجموعتين من حيث العمر و التي تتراوح ما بين 10 الدي المحموعتين من حيث العمر و التي تتراوح ما بين 10 الدي النادر اسة اجريت في مستشفى ازادي التعليمي/ دهوك بينما الحالات الاصحاء تم جمعهم من المراكز والمؤسسات الحكومية المختلفة و الكليات و المخيمات.

النتائج: متوسط العمر لكلا المجموعتين كان7,6±33,5 و 6,5± 33,1 على التوالي يشكل المرض المصابين ب مرض الكيسي الليفي حوالي 90% والاورام الغدية الليفية يقدر حوالي 88% بينما الالم الدوري للثدي تشكل حوالي 20% فقط. ثمانية وسبعون بالمائة من المصابات بالامراض الحميدة في الثدي وثمانون بالمئة من الاصحاء سريريا كانت نسبة الكوليسترول في الدم طبيعية ( القيمة الاحتمالية اقل من (0,8). كان هناك فرق كبير وواضح في نسبة الكوليسترول الكلي والبروتين الدهني منخفض الكثافة للغاية (VLDL) بين مجموعتين، حيث كانت النسبة مرتفعة لدى المرضى أكثر من مجموعة الاصحاء سريريا بقيمة احتمالية اقل من 0,000 و 0,000 على التوالي. وبخصوص العلاقة بين نسبة الكوليسترول والمسببات المختلفة لامراض الثدي الحميدة لم يكن هناك اختلاف في القياسات ما عدا البروتين الدهني منخفض الكثافة للغاية (VLDL) كانتا مستواهما مرتفعة لدى المصابات بالاورام الغدية الليفية بقيمة احتمالية اقل من 0,000 و 0,000 على التوالى.

الاستنتاجات: حسب الدراسة الحالية هناك علاقة بين المصابات بامراض اللذي الحميدة و اختلاف في نسبة الكوليسترول الكلي و البروتين الدهني منخفض الكثافة للغاية. (VLDL) واتضح من هذه الدراسة ايضا ارتفاع في نسبة البروتين الدهني منخفض الكثافة للغاية (VLDL) لدى المصابات بالاورام الغدية الدهني منخفض الكثافة الغاية ولكن هناك حاجة الى المزيد من الليفية ولهذا فاننا نوصي بقياس مستوى الدهون للواتي يعانين من امراض الثدي الحميدة ولكن هناك حاجة الى المزيد من الابحاث في هذا الموضوع من اجل بحث عن تاثير العلاج الخافض للدهون على تحسين الاعراض و المساعدة في علاجها