Ovarian Cysts in Unmarried Women in Tikrit City

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Abstract

Ovarian cysts are fluid filled sacs inside the ovary that are common in women during their reproductive years .Most functional cysts can be managed conservatively and disappear spontaneously whill Surgical intervention is usually required when an ovarian cyst presents with acute symptoms.

To study the relation of cyst to body mass index and to estimate the types and method of intervention with signs and symptoms of patients

ninety –four women that were diagnosed with ovarian cysts and were treated at the department of obstetrics and gynecology in Tikrit Teaching Hospital were enrolled in the studyfrom 2010-2013.

it was founded that 59.6% of patients from age group 15-30 years.Most or patients from urban which account about 63.8% and 59.6% were housewives ,it was founded that 40.4% had having MBI more than 30 figure .It was founded that 40 case from the total study patients (94) the cyst site were at left side ,59.6%(56/94) were simple cyst.From the study finding about 46.8% of patients the main presenting symptom was amenorrhea .It was found that 59.57% of cyst size was below 5 cm and only 4,26% was measured more than 10 cm and removed by lapratomy or laparoscopy while no rolled for medical treatment in such size.

Ovarian cyst is consider a major public health problem which have a variety of clinical presentation and need many method for management according to the size and site.

Key words: Ovarian cyst, management of ovarian cyst.

Introduction

In the past two decades the increased use of new non-invasive diagnostic techniques such as ultrasonography has led to increased rate of diagnosis of cystic musses. [1]

Ovarian cysts are fluid filled sacs inside the ovary that are common in women during their reproductive years. [2]

Ovarian tumors and cysts are major problem in women [3] and the most common cause of pelvic masses in women. [4]

They occur in 30% and 50% of females with regular and irregular masses respectively as well as 6% of postmenopausal females. Most ovarian cysts among women of reproductive age are physiological (functional), consisting of either follicular cysts or cystic corpus luteum. [5]

Dermoid cysts are a combination of all tissue types (mesenchymal, epithelial and stroma), up to 10% of dermoid cysts can be bilateral.

Inflammatory ovarian cysts are usually associated with PID and is most common in young women. Patients may present with endometriomas often known as "chocolate cysts" due to the presence of clotted blood within the ovary. [6]

Most cysts are harmless and go away without any treatment, but some cause problems such as rupturing, bleeding or pain and surgery may be required to remove the cyst. [2]

Some or all of the following symptoms may be present, though it is possible not to experience any symptoms:

Abdominal pain, uterine bleeding, swelling or bloating in the abdomen, change in frequency or ease of urination or difficulty with bowel movements, nausea or vomiting, fatigue, headaches and weight gain. [7]

A pelvic ultrasound, preferably transvaginal, will reveal the dimensions and morphology of the mass. [8]

Management depends on the presentation (cyst accident or asymptomatic finding) and the risk of malignancy. Most functional cysts can be managed conservatively and disappear spontaneously within two cycles if managed with COCP or observation alone. Surgical intervention is usually required when an ovarian cyst presents with acute symptoms. [8]

Materials and Methods

Official agreement was performed from all patients involved in current study and from administrative staff of Tikrit teaching hospital

Study design :

During the years from 2010to2013 ninety –four unmarried women that were diagnosed with ovarian cysts and were treated at the department of obstetrics and gynecology in Tikrit Teaching Hospital were enrolled in the study.

The clinical presentation, diagnosis and Gynecological ultrasound by trans-abdominal sonography, color Doppler sonograph, methods of treatment, and clinical outcome were evaluated.

All information about demographical characteristic of patients were collected and all types of management for ovarian cyst were documented .

Data were collected and analyzed by software program (spss version 19).

Results

From table (1) it was founded that 59.6% of patients from age group 15-30 years while only 3.2% less than 15 years .

Most or patients from urban which account about 63.8% and 59.6% were housewives as demonstration in table (2).Regarding the body mass index it was founded that 40.4% had having MBI more than 30 figure (1).

It was founded that 40 case from the total study patients (94) the cyst site were at left side and 32 on the right side and only 12 cases were their cysts located in both sides and in relation to the type of cyst it was demonstration that 59.6%(56/94) were simple cyst 26 of them in right side but 21.3% was hemorrhagic (20/94) 16 of them were in the left side and dermiod cyst account 19.1% (18/94) 12 of them in right side and 4 in both sides as shown in table (3).

From the study finding about 46.8% of patients the main presenting symptom was amenorrhea while 44.7% were complaining from abdominal pain and only 8.5% were presenting with other than amenorrhea nor abdominal pain as shown in table (4).

It was found that 59.57% of cyst size was below 5 cm and most of them treated by medical approach and only 4,26% was measured more than 10 cm and removed by lapratomy or laparoscopy while no rolled for medical treatment in such size as demonstration by table (6).

From table (6) 59.6% of patients were having simple cyst while 21.3% their cyst was hemorrhagic cyst and 19.1% were having dermiod cyst but most of patients were treated by medical method for all types of cysts whether simple or hemorrhagic .

Table (1) Age characteristics of study patients

Age/ years	No.	Percent
<15	3	3.2%
15-30	56	59.6%
30-45	31	33%
>45	4	4.2%
Total	94	100%

Table (2) Residence and occupation of the patients

Item	No.	Percent
1. Residence		
Urban	60	63.8%
rural	34	36.2%
2. Occupation		
House wife	56	59.6%
Other	38	40.4%

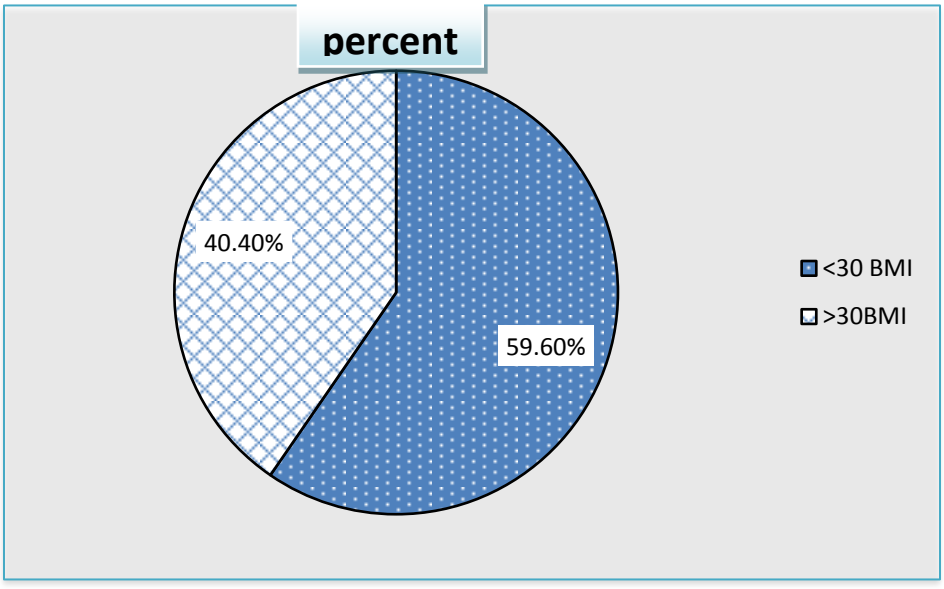

Figure (1): BMI of study patients

Table (3): Distribution of each type of cyst according to the site

Type/ site	Right side	Left side	Bilateral	Total	Percent
Simple cyst	26	22	8	56	56.6%
Hemorrhage cyst	4	16	0	20	21.3%
Dermoid cyst	12	2	4	18	19.1%
total	32	40	12	94	100%

Table (4): Distribution of cases according to type of presentation

Presentation	No.	Percent
Amenorrhea	44	46.8%
Abdominal pain	42	44.7%
Other	8	8.5%
Total	94	100%

Table (5): Management of cyst according to its size

Size	Medical	Laparoscopy	Lapratomy	Total	Percent
<5	40	12	4	56	59.57%
5-8cm	11	3	14	28	29.79%
8-10	1	1	4	6	6.38%
>10	0	2	2	4	4.26%
Total	52	18	24	94	100%

Table (6): Type of treatment according to type of cyst

Type/ site	Medical	Laparoscopy	Lapratomy	Total	Percent
Simple cyst	38	18	0	56	59.6%
Hemorrhagic cyst	14	0	6	20	21.3%
Dermoid cyst	0	0	18	18	19.1%
Total	52	18	24	94	100%

Discussion

This study which was carried out on unmarried women in Tikrit city shows that 92.6% of cases were in the age group 15-45 years which is the reproductive age, as shown in table 1. Ovarian tumors are relatively uncommon in children. [9]

A study done by Maliheh Arab et al, 2012, shows that the mean age of functional ovarian cysts in their study was 36 years, complicated functional ovarian cysts was present in younger patients (mean age 30 for hemorrhagic and 25 for torsed cysts). Similar mean age for functional ovarian cysts have been reported in other studies (Doret M. et al; 2001 and Simcock B, et al; 2005) to be 34.5 years to 38 years. [5]

Most cystic ovarian masses, particularly in teenagers and perimenopausal women are follicular ovarian cysts. [1]

Table -3- shows that 59.6% of cysts were simple, 21.3% and 19.1% were hemorrhagic and dermoid respectively and this agrees with other studies. (Maliheh Arab et al; 2012, Najafiyan Mahin et al; 2012) [5, 3]

In table -3- we see that most of the cysts were on the left side, Najafiyan Mahin et al also in their study showed that 51% of ovarian cysts were in the left side followed by the right side then bilateral [3], which was the same finding in our study.

Ovarian cysts require attention because some of them can twist or rupture, bleed and create a medical emergency. Other cysts that persist can interfere with normal ovarian function and impair a women's ability to conceive by producing hormones that prevent normal egg release from the ovary, for example. [10]

The commonest presentation found in our study was amaorrhea followed by abdominal pain as shown in table 4. Shih-Ming Chu et al; 2010 showed in their study on ovarian tumors in pediatric age group that abdominal pain was the commonest presentation, followed by abdominal distension then nausea and vomiting. [9]

Most of the cysts size in our study was less than 5cm and a small percent of cases had cysts more than 10cm, this finding agrees with the study done by Maliheh Arab et al; 2012, in which the mean size of cysts in their study was 5.7 cm and found that follicular cysts (the most common form of functional ovarian cysts) are rarely larger than 8-10cm. [5]

The decision about which treatment to recommend to women with ovarian cysts should be based on age, hormonal status (whether permenopausal or postmenopausal), the size of the cyst and whether the structure is unilocular or multilocular. [11]

Table -5- and -6- show that most cysts were treated by a medical treatment especially with simple cysts

and cysts less than 5 cm in size and surgical treatment was above for large cysts and dermoid cysts mainly.

These results are in agreement with Antonio MacKenna etval, 2000 [12] while Maliheh Arab et al 2012, showed that 58.5% of benign ovarian surgeries was due to functional ovarian cysts. [5]

In the surgical treatment of benign ovarian cysts in young women, independently of its size, one of the main goals that all syrgeons need keep in mind is to preserve the reproductive and hormonal functions of the ovaries and prevent recurrence. [4]

A major factor that will make the gynaecological surgeon decide to perform a laparotomy is the size of the ovarian mass. [13]

Unnecessary surgery represents a significant cost to the patient and to society, surgery in young patients may interfere with fertility and increase the risk of ectopic pregnancies, laproscopy is becoming an alternative to laparotomy for benign adrexal masses. [1]

Laproscopy is considered the gold standard approach to manage benign ovarian cysts. [13] A randomized prospective study comparing laproscopy and laparotomy in the management of patients with ovarian masses less than 10 cm in diameter reported a significant reduction in operative morbidity, postoperative pain and analgesic requirement, hospital stay and recovery period. [4]

Micheal S. Dolan et al, 2006 concluded that giant ovarian cysts can be managed laproscopically regardless of the size of the cyst, [14] another study done by A. Alobaid et al 2013, showed 5 cases with huge ovarian cysts managed by laparoscopic surgery without any complications. [13]

Our study was done on unmarried women, in laparoscopic surgery in adult virgin women, elevating intra-abdominal was a very helpful maneuver to provide additional room to facilitate dealing with the large adnexal lesion in the absence of the intravaginal uterine manipulator (due to the need to preserve virginity), other approaches may be considered suggest using gauze attached to ovum forceps to manipulate the uterus via the rechim. [15]

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