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Research Article

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Most recurrent visit in infertility center at Al-Batool teaching hospital in Iraq

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Abstract

Background
Infertility is considered as a major health care problem of different communities. The high prevalence of this issue doubled its importance. A significant proportion of infertility have been related to environmental conditions and also acquired risk factors. Different environmental conditions emphasized the need to study the different causes of infertility in each area.
Aim of this study
The most recurrent visit between female in the infertility center in Al_batool teaching hospital
Design: A cross sectional study
Patient and method
The study was carried out in infertility unit of 70 female patients randomly .According to the (name; age.; residence; blood group ; occupation of female husband ; time of infertility ; primary or secondary; (pcos) or another male factor or un explain) for every one patient
This study conducted at infertility unite during the period 25/10/2017 to ——30/1/2018
Objective:
The aim of this study was to determine the frequency causes of infertility in infertile couples.
Result
There are numbers female infertility visit the unit of infertility show increase visiting in female with PCOS and male factor and unexplained.
and show more common in female with blood group A and O less than in B and AB and more common between female husband SOLDIER and FREE WORKER
Conclusion:
Etiology pattern of infertility in our study is similar with the many other patterns that have been reported by the World Health Organization. However, frequency of menstrual disorders is much higher than other studies that require further consideration.

Keywords: Infertility, Al_batool teaching hospital, PCOS, blood group.

Introduction

There has been considerable debate about an acceptable definition of infertility First, there is confusion about the use of the word itself—"infertility" which upon translation means "not fertile" and therefore would be synonymous with sterility. While it is true that all women who are sterile would be considered infertile, the contrary is not true—not all women who are infertile are sterile. Therefore, many women would be better categorized as being sub fertility instead of infertile.

Despite these shortcomings, the all-inclusive term "infertility" is here to stay and there is little that can be done to change it.

The most succinct definition of infertility has been published and recently updated by the American Society for Reproductive Medicine……

Infertility is a disease, defined by the failure to achieve a successful pregnancy after 12 months or more of regular unprotected intercourse. Earlier evaluation and treatment may be justified based on medical history and physical findings and is warranted after 6 months for women over age 35 years.(1)

Infertility is one of the major health care problems in all societies worldwide.

The average prevalence of infertility in developed countries is 3.5-16.7% .

And in developing countries 6.9-9.3.

Although many studies have been conducted on the prevalence of infertility in the world, because infertility is increasing and the life style is changing and there is no comprehensive research in this area it seems necessary to investigate the causes of infertility Knowing the frequency of different causes of infertility in every region is important and can be effective in manager decisions.

Due to the progress of methods of infertility treatment and the development of infertility treatment clinics in many cities the majority of people within fertility problems after a while referred to these centers.

Thus it seems that the infertile persons admitted to these centers can be a target population for the study of infertility in each region. In this study, different causes of infertility were examined in infertile couples.(2)

Causes of infertility are numerous such as anatomical, physiological and genetic factors. Many environmental and acquired factors also influence fertility and may lead to infertility. Menstrual and ovulation dysfunction and uterine factors are the most.

The most common cause visit to this center

Endometrioses are cysts caused by endometriosis, a condition in which the tissue normally lining your uterus (endometrium) grows outside the uterus. These ovarian cysts may be associated with fertility problems.

Ovarian cysts resulting from polycystic ovary syndrome. Polycystic ovary syndrome (PCOS) is a condition marked by many small cysts on your ovaries, irregular periods and high levels of certain hormones. PCOS is associated with irregular ovulation and menstural dysfunction which may contribute to problems with fertility in some women. (3)

Uterine Factors affecting fertility

Uterine pathologies are the cause of infertility in as many as 15% of couples seeking treatment and are diagnosed in as many as 50% of infertile patients . For patients undergoing in vitro fertilization, lower pregnancy rates are observed in the presence of uterine cavity anomalies. The correction of these anomalies has been associated with improved pregnancy rates. Therefore, the evaluation of the couple with infertility should include an assessment of the endometrial cavity. Most endometrial pathologiesimplicated in infertility result in both structural and functional impairment. Endometrial molecular mechanisms of implantation and gestation are exquisitely controlled and remarkably complex. Consequently, even subtle defects in endometrial progression from the peri–implantation, luteal phase to the mature decidua supporting a placenta and fetus can result in infertility or early pregnancy loss.

Congenital uterine anomalies may be associated with infertility, spontaneous pregnancy loss in the first or second trimester, or late–trimester pregnancy complications. (4)

Endometrial Polyps

Even in the absence of abnormal uterine bleeding, endometrial polyps may be discovered in women with infertility. The incidence of asymptomatic endometrial polyps in women with infertility has been reported to range from 10% to 32%

Third World countries, tuberculous endometritis may be an important cause of uterine factor infertility. Tuberculous endometritis differs from most other types of endometrial infection, and uterine scarring and infertility are significant sequelae even after treatment. Because intrauterine adhesions may interfere with embryo implantation, severe forms of Asherman syndrome have been associated with amenorrhea, menstrual irregularities, spontaneous abortion, and recurrent pregnancy loss.(5)

Infectious Factors

The relationship between subclinical infection and fertility has received considerable attention. Particular interest has focused on two potential pathogens: Chlamydia trachomatis and Mycoplasma species. The association of chlamydia with PID is well established. Chlamydia is the predominant pathogen detected in about 20% of cases of acute salpingitis in the United States. Chlamydia may produce asymptomatic infection in the female genital tract, and it is likely that some women experience silent tubal infection. Despite few if any symptoms, these infections may result in significant tubal damage. A possible link between infection and infertility is suggested by evidence that the prevalence of positive chlamydial cultures may be higher among infertile patients than among control group.

In patients undergoing egg retrieval as part of IVF treatment, the incidence of bacterial vaginosis was 25%. Although their pregnancy rates were not affected, patients with bacterial vaginosis (BV) had a significantly higher risk for spontaneous abortion than normal patients.

Increased rate of spontaneous pregnancy loss is greatly associated with BV, treatment of bacterial vaginosis before or during IVF treatment would alter the rate of spontaneous abortion.(6)

Unexplained Infertility

The laboratory assessment of an infertile couple is relatively simple and should be performed rapidly to establish a diagnosis and initiate appropriate therapy. Evaluation of the man by semen analysis in an accredited laboratory skilled in andrology testing is essential.

Ovulation should be documented in women using over–the–counter ovulation detection kits plus the midluteal serum progesterone level can be assessed to confirm ovulation. Unless laparoscopic surgery is already planned for some other indication, tubal obstruction should be excluded using HSG. If laparoscopy is indicated, laparoscopic chromopertubation can be performed at the time of surgery. Any previous infertility investigations should be reviewed and repeated if the results are in doubt. If the basic evaluation reveals normal semen parameters, evidence of ovulation, patent fallopian tubes, and no other obvious cause of infertility, the couple is diagnosed with unexplained infertility. This diagnosis accounts for up to 30% of couples with infertility. (7)

Materials and Methods

A total of 70; patient undergo female infertility center. A detailed case history was taken for all patient:

The study was carried out in infertility unit of 70 female patients randomly

27 case with PCOS
21 case associated un explain
9 case no factor
13 case with male factor

Age ;blood group ;residence; occupation of female husband ; time of infertility ; primary or secondary ; pcos ; no and unexpain factor and another male factor Between female .

In this cross sectional descriptive in male and female that were referred to infertility clinic of Al-Batool Hospital during 2017-2018, were examined. This center is the only governmental center for infertility in Diyala/ Bquba. Sampling was based on census method.

Information about the patients was obtained from medical examinations and laboratory findings. To analyze the data, descriptive statistics such as frequencies and the mean were used.

And the study also divided according age between (15-35)(35-45) years

Results

A total of 70 patients were studied and several tables were done include age .primary or secondary, occupation of female husband, blood group, causes of infertility couple

Table1: The frequency and cases result from this search

1-	Age	15——35y	48 case	35—-45y	22case
2-	Prim'sec	Primary	55case	Secondary	15case
3-	Time of infertility	1—3y	31 case	3———y	39case
4-	Ocuppation	Free work (33)case	Solider (21) Case	Another (16)case	
5-	Blood group	A(30)case	B(10)case	O(22)case	AB(8)case
6-	Causes	PCOS (27)case	Un explain (21) case	Male factor (13) case	No factor (9)case

Table 2: percentage

N	Per	
Age	(15–35) —68%	(35–45)——32%
Prim or sec	Pri———79%	Sec—-21%
Time	(1–3y)—44%	(3—y)——56%
Occoupation	Free—47%	Solider—-30% Another—23%
Blood group	A—-47% B—-16%	O——31% AB——11%
Causes	pCOS—39% Un explain —-30%	Male factor —-19% No —-13%

Discussion

Many studies have been done to evaluate the cause of infertility.

The main causes of infertility include male factor, decreased ovarian reserve, ovulatory disorders (ovulatory factor), tubal injury, blockage, or para tubal adhesions (including endometriosis with evidence of tubal or peritoneal adhesions), uterine factors, systemic conditions (including infections or chronic diseases such as autoimmune conditions or chronic renal failure), cervical and immunologic factors, and unexplained factors (including endometriosis with no evidence of tubal or peritoneal adhesions).

In our study that result primary infertility about 68%of per and 22% of secondary that caused by ovarian cyst or drug ;eating disorder anorexia ;stress and excessive weight may cause it.

And either many causes mention it above

And this related to increase in primary may this return to the unsuccessful to conceive over the course in full one year

● The basic investigations that should be performed before starting any infertility treatment are semen analysis, confirmation of ovulation, and the documentation of tubal patency (8)

Disorders of ovulation account for about 30% to 40% of all cases of female infertility. These disorders are generally among the most easily diagnosed and most treatable causes of infertility.(9)

● The most common cause of oligo–ovulation and anovulation—both in the general population and among women presenting with infertility—is polycystic ovarian syndrome (PCOS)..(10)

The Previous Contraception may caused the un explain factor in the infertile women with secondary in fertility
Between 2006 and 2008, the contraceptive agents used by U.S. women (excluding steriliza- tion) were as follows: oral contraceptives, 43%; condoms, 22%; intrauterine device (IUD), 7%; and injectables, 4% (10) and the Occupational Hazards increase incidance of infertility between infertile couples if that primary or secondary ;So that

The Chemical exposures can result from either an environmental exposure or more likely exposure in the workplace.

The male is more susceptible to environmental toxins since spermatogenesis is an ongoing and dynamic process. The first report of an occupationally related spermatotoxin appeared showed that men who worked at factories that produced dibromochloropropane (DBCP; a pesticide) had an increased incidence of infertility—the severity being dependent on the dose and length of exposure.

And diet ;life style ; stress and anxiety (11) history of irregular menstrual cycles is suggestive of an ovulatory problem.

Previous use of an intrauterine device (IUD), a history of a tubal pregnancy, or a pelvic infection can raise suspicion of a tubal factor.

Complaints of worsening dysmenorrhea or dyspareunia may suggest the presence of endometriosis. Previous cryosurgery, conization, or the loop electrosurgical excision procedure (LEEP) of the cervix increases the chance of a cervical factor.(12)

Factors from either or both partners may contribute to difficulties in conceiving; therefore, it is important to consider all possible diagnoses before pursuing invasive treatment. The relative prevalence of the different causes of infertility varies widely among patient populations . In many cases, no specific cause is detected despite a thorough.

Very few couples have absolute infertility, which can result from congenital or acquired irreversible loss of functional gametes in either partner or the absence of reproductive structures in either partner.

In these specific instances, couples should be counseled regarding their options of adoption, the use of donor gametes, or surrogacy. However, most couples that have difficulty conceiving have subfertility. According to this fundamental concept, most couples could conceive spontaneously in time, but because of known or unidentifiable causes. Another reason to seek medical attention, particularly among older women, is that as time passes with unsuccessful spontaneous attempts, fecundability will be compromised further by increasing age and concomitantly decreasing ovarian reserve.(13)

So that; Any couple who is interested in pregnancy should have a thorough evaluation to identify factors that may put the patient at risk for a complicated pregnancy. Depending on the situation, further workup or counseling may be indicated before the couple attempts a pregnancy. Social history with an assessment of lifestyle habits is an important part of the medical history that should be obtained from the male and female partners. The use of tobacco, alcohol, and recreational drugs should be ascertained and the couples appropriately counseled. These habits may not only be harmful during pregnancy but could also impair conception should be a void it (14)

Conclusion

Etiology pattern of infertility in our study is similar with the many other patterns that have been reported by the World Health Organization. However, frequency of menstrual disorders is much higher than other studies that require further consideration.

Recommendation

The present study should be further evaluated by doing long term treatment and follow up studies on larger samples.

More research in this direction is needed in the future, especially those which concern associated primary or secondary and its effects of management also, other correlating factors such as duration of infertility and medications.

References

Gurunath S, Pandian Z, Richard AR, Bhattacharya S. Defining infertility a systematic review of prevalence studies. Hum Reprod Update. 2011;17:575–588. [PubMed]

Boivin J, Bunting L, Collins J, Nygren K. International estimates of infertility prevalence and treatment-seeking: potential need and demand for infertility medical care. Hum Reprod. 2007;22:1506–1512. [PubMed]

Direkvand Moghadam A, Delpisheh A, Sayehmiri K. The trend of infertility in Iran, an original review and meta-analysis. Nursing Practice Today. 2014;1:46–52.

Macaluso M, Wright-Schnapp T, Chandra A, Johnson R, Satterwhite C, Pulver A, et al. A public health focus on infertility prevention,detection, and management. Fertil Steril. 2010;93:16. [PubMed]

Hill, G. A., Freeman, M., Bastias, M. C., Rogers, B. J., Herbert, C. M., 3rd et al. The influence of oocyte maturity and embryo quality on pregnancy rate in a program for in vitro fertilization-embryo transfer. Fertil Steril 1989; 52:801–6.

Hardarson, T., Hanson, C., Sjogren, A. and Lundin, K. Human embryos with unevenly sized blastomeres have lower pregnancy and implantation rates: indications for aneuploidy and multinucleation. Hum Reprod 2001; 16:313–8.

Jackson, K. V., Ginsburg, E. S., Hornstein, M. D., Rein, M. S. and Clarke, R. N. Multinucleation in normally fertilized embryos is associated with an accelerated ovulation induction response and lower implantation and pregnancy rates in in vitro fertilization-embryo transfer cycles. Fertil Steril 1998; 70:60–6.

Munne, S. Chromosome abnormalities and their relationship to morphology and development of human embryos. Reprod Biomed Online 2006; 12:234–53.

Prados, F. J., Debrock, S., Lemmen, J. G. and Agerholm, I. The cleavage stage embryo. Hum Reprod 2012; 27(Suppl. 1): i50–71.

Perez, G. I., Tao, X. J. and Tilly, J. L. Fragmentation and death (aka apoptosis) of ovulated oocytes. Mol Hum Reprod 1999; 5:414–20.

Alikani, M., Cohen, J., Tomkin, G., Garrisi, G. J., Mack, C. et al. Human embryo fragmentation in vitro and its implications for pregnancy and implantation. Fertil Steril 1999; 71:836–42.

Chi, H. J., Koo, J. J., Choi, S. Y., Jeong, H. J. and Roh, S. I. Fragmentation of embryos is associated with both necrosis and apoptosis. Fertil Steril 2011; 96:187–92.

Tal R, Holland R, Belenky, et al. Incidental testicular tumors in infertile men. Fertil Steril 2004; 82:469–471

The American College of Obstetricians and Gynecologists. Obesity in pregnancy, 2005. Committee opinion; No. 315.

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