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ORIGINAL ARTICLE

Frequency of Pelvic Inflammatory Disease in Infertile Patients

RAISHAM SALEEM[1], SAADIA MIR[2], SHAFIA ZAIB MIR[3], AYESHA MANZOOR[4]
[1,2]Senior Registrar, Khawaja Muhammad Safdar Medical College/ Allama Iqbal Memorial Teaching Hospital, Sialkot
[3]Consultant Gynaecologist, Saudi National Hospital, Makka, KSA
[4]Consultant Gynaecologist, Medicare Hospital, Rawalpindi
Correspondence to Dr. Raisham Saleem

ABSTRACT

Aim: Frequency of pelvic inflammatory disease in women presenting with infertility
Study design: Cross sectional research
Setting: Obstetrics/Gynaecology Deptt., Services Hospital, Lahore from 20-10-2017 to 20-04-2018.
Methods: One hundred married females with Infertility (Primary/Secondary) were included in the study. Patients with H/o intrauterine contraceptive devices usage, diabetes, male factor Infertility and H/O pelvic surgery were excluded. All women were taken complete history and detailed physical and gynecological examination and HVS was sent to laboratory for culture.
Results: Age was from 20 to 35 years with mean ± SD 29.41±2.35 yrs, mean±SD of weight 70.09±12.66kg, mean±SD height 1.54±0.09 meters, mean ± SD of BMI 29.67±5.09 Kg/m^2 and mean±SD duration of Infertility was 2.5±0.97 years. Majority of the patients were from 0-2 parity (92%). Primary infertility was found in 64% women while secondary infertility was 36%. Pelvic Inflammatory Disease was found in 27% patients.
Conclusion: Tubal damage before and during the index episode of PID is correlated with infertility.
Keywords: Infertility, Pelvic inflammatory disease, Frequency

INTRODUCTION

Most common infection in non pregnant women of reproductive age is PID[1]. PID is an important public health problem. One in 8 women with a H/o PID experience difficulties getting pregnant[2]. To understand the etiology, pathogenesis and treatment of acute PID, important advances have occurred in last 25 years[3]. Polymicrobic causes of PID are well established and there is utilization of broad spectrum antimicrobial drugs for treatment of acute PID[4].

The objective of the study was to find out frequency of pelvic inflammatory disease in women presenting with infertility

METHODOLOGY

Study design: Cross sectional study in the Department of Obstetrics & Gynaecology, Services Hospital Lahore from 20-10-2017 to 20-04- 2018.
Sample size: 100 cases
Inclusion criteria: Women age 20-35 years, Infertility (Primary/Secondary) as per operational definition and married were included.
Exclusion criteria:

- Patients with history of use of intrauterine contraceptive devices
- H/O diabetes
- Male factor Infertility (Sperm count<15,000,000/ml and motility <40%)
- H/O pelvic surgery

Data collection procedure: One hundred patients from OPD of Services hospital Lahore were included in the study. Permission from ethical committee was taken. Baseline demographic information i.e. age, duration of infertility, type of infertility and BMI was taken. Informed consent was taken from each patient. All women were taken complete history. High vaginal swab (HVS) was sent to lab for culture. SPSS version 20 used for data analysis.

RESULTS

Detail of results is given in tables 1,2,3,4,5,6.

Table 1: Demographics

Demographics	Mean±SD
Age(yrs)	29.41±2.35
Weight (Kg)	70.09±12.66
Height (m)	1.539±0.09
BMI(Kg/m^2)	29.665±5.09
Duration of Infertility (yrs)	2.5±0.97

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Table 2: Frequency according to parity

Parity	n	%age
0-2	92	92%
>2	8	8%

Table 3: Frequency according to type of infertility

Type of infertility	n	%age
Primary	64	64%
Secondary	36	36%

Table 4: Frequency according to PID

PID	n	%age
Yes	27	27%
No	73	73%

Table 5: Stratification with respect to type of infertility

Type of Infertility	PID		P-value
	Yes	No	
Primary	18(28.1%)	46(71.9%)	0.735
Secondary	09(25%)	27(75%)	
Total	27(27%)	73(73%)	

Table 6: Stratification with respect to duration of infertility

Duration of Infertility (yrs)	PID		P-value
	Yes	No	
1-5	27(27.8%)	70(72.2%)	0.285
> 5	00(0.00%)	03(100%)	
Total	27(27%)	73(73%)	

DISCUSSION

My study has shown that frequency of PID was 27% in women presenting with infertility. In one study, it is found that frequency of PID was 42% in women presenting with infertility.[5] In another study, there is 20% infertility rate with two attacks and 40% rate with 3 or more attacks of PID[6]. This is in accordance with our study. The study also showed that tubal damage severity in acute PID causes infertility subsequently[7].

In other study, PID with non gonococcal infection showing more chances of infertility than that of PID of gonococcal infection[8]. Chances of serum antibody levels with infection of N. gonorrhoeae and C. trachomatis are elevated in infertile females with disease of tubes when comparing with tubes of normal anatomy[9].

In a study by Paavonen et al[10], it is seen that abnormality in HSG after PID attack was not related to the infection of C. trachomatis. This finding is in accordance to our study.

CONCLUSION

Damage of tubes during and before PID attack is correlated with infertility.

Conflict of interest: Nil

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