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HYSTEROLAPAROSCOPY AS A TOOL IN EVALUATION OF FEMALE INFERTILITY

Obstetrics & Gynaecology

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ABSTRACT

Introduction: Female factors contribute 40-55 % of infertility .Laproscopy has the ability to visualize and manipulate the uterus , tubes and ovaries. Hysteroscopy helps in visualizing uterine cavity and identifying possible causes of female infertility.Combining them is a valuable method for diagnosing & treating infertility simultaneously **Materials and Methods:** This is a prospective observational study carried out at ASRAM medical college, a Tertiary care hospital, Eluru over a period of 2 years. 100 cases of both primary and secondary infertility were taken into study. The objective of this study is to evaluate the role of various etiological factors of infertility by hysterolaparoscopy and assess the role of hysterolaparoscopy as therapeutic intervention **Results:** Majority (42%) belong to 26-30 yrs of age. 72% had primary infertility and 28% had secondary infertility.In both primary& secondary infertility, majority belong to 26-30 yrs of age.In primary infertility, majority (66.7%) had infertility of 1 to 5years followed by 20.8% had infertility for 6 to 10years.In patients with secondary infertility, majority (46.4%) ohad infertility for 6 to 10years followed by 39.3% had infertility for 1 to 5years. In primary infertility, 73.6% of patients had regular menstrual cycle.there was no statistical significance between primary and secondary infertility in case of BMI, uterine and USG findings.There was significant statistical difference in tubal features, ovarian features and abnormal peritoneal features among patients with secondary infertility when compared to primary infertility. **Conclusion**: hysterolaparoscopy has been proved to be a safe and beneficial technique for patients with infertility. It should be taken into consideration as a daycare foundation study for assessing infertile patients. It can accurately diagnose a number of significant pathologies that are frequently missed by traditional imaging methods, including peritoneal adhesions, uterine synechiae, endometrial polyps, submucus myoma, septate uterus, and peritoneal endometriosis. Additionally, it aids in management planning and offers the benefit of therapeutic procedures including adhesiolysis, polypectomy, and endometrial deposit fulguration, which can all be completed in a single session if necessary.

KEYWORDS

INTRODUCTION

Female factors contribute 40-55 % of infertility .Laproscopy has the ability to visualize and manipulate the uterus , tubes and ovaries .Hysteroscopy helps in visualizing uterine cavity and identifying possible causes of female infertility.Combining them is a valuable method for diagnosing & treating infertility simultaneously

AIMS AND OBJECTIVES :

Aim:

To study and evaluate various causes of infertility in female with primary and secondary infertility by Hysterolaparoscopy.

Objectives:

- To evaluate the role of various etiological factors of infertility by Hysterolaparoscopy
- To assess the role of Hysterolaparoscopy as therapeutic intervention

MATERIALS AND METHODS

This is a prospective observational study carried out at ASRAM medical college, a Tertiary care hospital, Eluru over a period of 2 years. 100 cases of both primary and secondary infertility were taken into study. The objective of this study is to evaluate the role of various etiological factors of infertility by hysterolaparoscopy and assess the role of hysterolaparoscopy as therapeutic intervention

Inclusion Criteria

1. All the women aged 20 – 40years attending OPD of ASRAM with primary and secondary infertility
2. Women with primary and secondary infertility after evaluating male partners
3. Women with infertility with normal USG, HSG and hormonal study

Exclusion Criteria

1. Age more than 40years
2. Pre-puberty and menopausal women
3. Couples with male infertility
4. Patients with active pelvic infections

RESULTS AND ANALYSIS

Table 1: Distribution Of Patients According To Tubal Features: (n=100)

Tubal features	Primary infertility		Secondary infertility		Total	
	N	%	N	%	N	%
B/L tubes patent	52	71.2	14	43.8	66	62.8
B/L tubes block	12	16.4	9	28.1	21	20.0
U/L tube block	8	11.0	5	15.6	13	12.4
Hydrosalphinx	1	1.4	4	12.5	5	4.8
Total	73	100.0	32	100.0	105	100.0
P value	0.016					

Table 2: Distribution Of Patients According To Ovarian Features: (n=100)

Ovarian features	Primary infertility		Secondary infertility		Total	
	N	%	N	%	N	%
Normal	53	73.6	16	57.1	69	69.0
Tubo-ovarian mass	1	1.4	1	3.6	2	2.0
PCOS	16	22.2	5	17.9	21	21.0
Ovarian cyst	2	2.8	6	21.4	8	8.0
Total	72	100.0	28	100.0	100	100.0
P value	0.017					

Table 3: Distribution Of Patients According To Peritoneal Features: (n=100)

Peritoneal features	Primary infertility		Secondary infertility		Total	
	N	%	N	%	N	%
Normal	67	93.1	19	67.9	86	86.0
Endometriosis	4	5.5	4	14.3	8	8.0
Pelvic adhesions	1	1.4	5	17.8	6	6.0
Total	72	100.0	28	100.0	100	100.0
P value	0.002					

Majority (42%) belong to 26-30 yrs of age. 72% had primary infertility and 28% had secondary infertility.In both primary& secondary infertility ,majority belong to 26-30 yrs of age.In primary infertility ,majority (66.7%) had infertility of 1 to 5years. In patients with secondary infertility, majority (46.4%) of had infertility for 6 to 10years .There is no statistical significance between primary and

secondary infertility in case of BMI and USG findings and uterine findings.There was significant statistical difference in tubal features, ovarian features and abnormal peritoneal features among patients with secondary infertility when compared to primary infertility.

DISCUSSION

Infertility impacts between 10% to 15% of couples globally. Infertility is caused by tuboperitoneal pathology in 40–50% of patients, uterine pathology in 15-20% of cases. Ovulatory dysfunction (30–40%) and male variables (30–40%) are additional factors. 10% of instances are classified as unexplained infertility.

Performing hysteroscopy and laparoscopy in the same session (a "one step" technique) may even eliminate the necessity for HSG in cases with "in milieu" pathology in the uterus. During the follicular phase of the cycle, hysterolaparoscopy was performed on all the ladies at the same sitting.[64,65]

CONCLUSION

Corrective operations can be performed in the same operating rooms as the hysterolaparoscopy, which has been proved to be a safe and beneficial technique for patients with infertility.It can accurately diagnose a number of significant pathologies that are frequently missed by traditional imaging methods, including peritoneal adhesions, uterine synechiae, endometrial polyps, submucus myoma, septate uterus, and peritoneal endometriosis. Additionally, it aids in management planning and offers the benefit of therapeutic procedures including adhesiolysis, polypectomy, and endometrial deposit fulguration, which can all be completed in a single session if necessary.

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