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Hysteroscopy as a comprehensive diagnostic and therapeutic tool in infertility management

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ABSTRACT

Background: The aim of the study is to study Hysteroscopy as a comprehensive diagnostic and therapeutic tool in modern art.The scheduled investigations were done to determine fitness for surgery. Patient was admitted one day prior to the procedure, and preanesthetic checkup was done. Hysteroscopy was scheduled in preovulatory period between day 5 and day 8 of cycle and done under general anesthesia. Hysteroscopy done along with diagnostic laparoscopy
Study Design: Observational study.

1. Introduction

Infertility is characterized as childlessness after 1year of unprotected intercourse. This is otherwise called sub ripeness. It influences 10-15% of couples in the regenerative age group.[1] Infertility addresses a day to day existence emergency to the couple encountering it. It might seriously influence the couple's mental concordance, sexual life and has numerous social ramifications. Consequently every gynecologist wonders whether or not to affirm barrenness until the individual in question has completely depleted all demonstrative and helpful modalities.

The consciousness of fruitlessness is expanded these days and multicentric way to deal with the treatment have been presented, yet the administration of barrenness is dependably challenging.[2]

Normal fertility depends on various male and female factors. Hysteroscopy is utilized for perception of Uterine cavity and cervical canal. Hysteroscopy can be consolidated in one meeting to allow a full study of the Uterine cavity and cervical canal and is valuable in distinguishing the reason for barrenness in female[3]

This likewise limits the emergency clinic stay of the barren individual for examinations.[4]

2. Materials and Methods

Study was conducted at Index Medical College Hospital and Research Centre in Dec 2013 to July 2015. All those patients who satisfied the inclusion criteria mentioned below were included in the study and those who had one or more criteria mentioned while exclusion criteria were deleted from the study. Thus 200 patients were selected for the study.The scheduled investigations were done to determine fitness for surgery. Patient was admitted one day prior to the procedure, and pre anaesthetic checkup was done. Hysteroscopy was scheduled in preovulatory period between day 5 and day 8 of cycle and done under general anesthesia.

2.1. Inclusion criteria

1. All the women aged between 20 to 40 years, attending outpatient with primary and secondary infertility.

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2. To evaluate the cause in women with primary & secondary infertility with normal semen analysis of husband.

2.2. Exclusion criteria

1. Severe cardiac or respiratory disease
2. Generalised peritonitis
3. Diaphragmatic hernia
4. Umbilical hernia

3. Result

Table 1: Duration of infertility

Duration of infertility in years	Primary infertility		Secondary infertility		Total	
	No.	%	No.	%	No.	%
20-25	86	57.3	17	34	103	51.5
26-30	49	32.6	29	58	78	39
31-35	07	4.6	02	04	09	4.5
36-40	08	5.5	02	04	10	05
Total	150	100	50	100	200	100

The distribution of patients according to duration of infertility.

Table 2: Findings on hysteroscopy

Duration of infertility in years	Primary infertility		Secondary infertility		Total	
	No.	%	No.	%	No.	%
Normal	19	12.6	07	14	26	13
Abnormal	73	48.6	21	42	94	47
Hyperemia (congestion)	18	12	05	10	23	11.5
Polyp	13	8.6	03	06	16	08
Septum	08	5.3	05	10	13	6.5
Atrophy/scarred	07	4.6	04	08	11	5.5
Adhesions	05	3.3	03	06	08	04
Fibroid	07	4.6	02	04	09	4.5
Total	150	100	50	100	200	100

Table 3: Operative interventions on hysteroscopy

Duration of infertility in years	Primary infertility		Secondary infertility		Total	
	No.	%	No.	%	No.	%
Septal resection	04	2.6	10	20	14	07
Polypectomy	55	36.6	11	22	66	33
Adhesiolysis	72	48	20	40	92	46
Myomectomy	19	12.6	09	18	28	14
Total	150	100	50	100	200	100

4. Discussion

Diagnostic hysteroscopy provides a reliable information in evaluation of uterine cavity and detection of intrauterine diseases.[5–8] Mean prevalence of uterine malformation in general population is 4.3%, in infertility is 3.5% and in recurrent pregnancy loss 13%.

4.1. The incidence of uterine anomaly is 7.6%. Subseptate and septate uterus is the most common uterine malformation in our study, which is undiagnosed by prior USG.

Septate uterus is the most common uterine anomaly associated with increased reproductive failure rates.[9] The reproductive performance of uncorrected septum is poor like 80% pregnancyloss, 10%preterm delivery, 10% term delivery. Pregnancy outcome improved after surgical correction in to 80% term, 5% preterm delivery,15% pregnancy loss. Complication rate of diagnostic hysteroscopy is low as 0.012%. In view of low complication, less time consuming hysteroscopy could be done in all infertility patients undergoing diagnostic laparoscopy.[10–12]

Diagnostic and therapeutic hysteroscopy having low complications(0.012%) and is less time consuming.[13,14 15 16]

5. Conclusion

Hysteroscopy may appear to be invasive, but is more beneficial, as diagnosis and therapeutic interventions can be done at the same sitting.

6. Source of Funding

None.

7. Conflict of Interest

None.

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