

STUDY OF 780 CASES OF INFERTILITY

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ABSTRACT

In spite of world population explosion, the desire for reproduction remains a basic human desire. Infertility is a complex phenomenon, and couples confronted with this problem, need a lot of emotional and psychological support besides intensive and prolonged investigations and treatment.

Overall incidence of infertility varies from 15 to 20% all over the world. Etiological variation from one country to another is due to their differences in social background.

A study of 780 cases of infertility have been carried out, to ascertain the cause of infertility.

These patients range from 18 to 40 years of age, and come from various social groups. After initial investigations, they were divided into four groups, depending upon the etiological factor.

It is observed that conception rate varied from one group to the other. Overall conception rate achieved was 44.743% which is reasonably encouraging with our present management.

METHOD AND COLLECTION OF CASES

Total number of cases studied were 780 at Bahawal Victoria Hospital Bahawalpur over a period of 14 months. These patients were in 18 to 40 years of age group and came from various social backgrounds. Majority of them had primary infertility and some secondary infertility. Almost all of them had been treated by various non-medics, medics, general practitioners and various specialists at various levels.

A standard protocol was adopted such as:

1. HISTORY TAKING

Detailed present and past medical, menstrual, obstetrical, surgical and gynecological history was taken.

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2. EXAMINATION

- I. General physical examination;
 - Blood pressure.
 - Weight, Height.
 - Breast Examination.
- II. Systemic examination,
 - Heart, Lung and Abdomen.
- III. Pelvic examination,
 - Speculum examination including cervical cytology.
 - Bi - Manual examination.

3. INVESTIGATION

Investigations should be done on both male and female partners, to find out the cause of infertility.

TABLE NO. 1

FEMALE	
General Blood	Blood for H b, WBC, ESR, Group (ABs & RH) VDRL, Rubella Titre Fasting Blood Sugar
Urine Examination	Albumin, Sugar, Ketones and Microscopic Examination.
Sonography	Oestrogens, Progesterones Prolactin Level.
Specific Serum	F.S.H., L.H., T.S.H.
X-Ray, TuberculineTest.	Chest, Skull for Pit. Fossa.
MALE	
General Blood	Blood for Hb, WBC, ESR, Group (AB & RH) FDRL, Fasting Blood Sugar
Urine Examination	Complete
Semen Analysis	
Specific Serum	F.S.H., L.H., Prolactin Level Testosterone level
Testicular Biopsy	
Tuberculine Test.	

As most of these patients had already had invasive procedures carried out by various medics

and non-medics, they all had some degree of pelvic inflammatory disease. Prior to any procedure, I gave them prophylactic treatment for a week on their first visit such as:

Tab. Augmentin	375 mg	1 TDS	for seven days
Tab. Reparil		2 TDS	for seven days
Tab. Fasigyn	300 mg	1 BD	for seven days
Triple Supha Cream per Vaginum			for seven days

Second visit is planned in the third week of the cycle; and I explain to them the line of investigations such as:

Diagnostic laparoscopy
Methylene Blue Dye Test
Endometrial Biopsy

I do this procedure as a day case, under general anesthesia and they stay in hospital for 3 to 4 hours after this procedure. They are given injection Augmentin 1.2 gram parenterally. After these investigations, I divide my patients into four groups, depending upon the factors involved in fertility such as:

1. Ovarian factor.
2. Tubal factor.
3. Male factor.
4. Miscellaneous factor.

GROUP 1: (310 PATIENTS)

OVARIAN FACTOR

Where patients have no other pelvic pathology except ovarian. This group includes following conditions such as:

Table No. 2

Sr. No.	Condition	No. of Patients.
1.	An Ovulatory cycle	70
2.	Irregular cycles.	100
3.	Polycystic ovarian syndrome of various degrees.	50
4.	Stein Leventhal syndrome	20
5.	Secondary amenorrhea due to,	
6.	Hyperprolactinemia leading to menstrual disorders.	100
7.	Post pill amenorrhea	50
8.	Hyperthyroidism causing menstrual disorders.	10
9.	Resistant ovarian syndrome.	5
10.	Pre - mature ovarian failure.	5

Choice of treatment is available with following medications, Various regimens are used,

depending upon personal experience. I use different combinations in different patients to suit them.

1. Clomiphene Citrate.
2. Pergonal. (F.S.H, & L.H.)
3. Profasi. (H.C.G)
4. FSH and LH Releasing factors.
5. FSH and LH Analogues.
6. Bromocryptine.
7. Lisuride.
8. Oestrogens.
9. Progesterone.
10. Laparotomy (Bi-Lateral Wedge Resection of Ovaries.)

These patients should be monitored by measuring their serum FSH, LH, Progesterone and Oestrogens during this treatment, at various times of the cycle.

I monitor my patients with Sonography from 6 day of the cycle till mid-cycle, when ovulation is expected.

GROUP 2 (160 PATIENTS)

TUBAL FACTOR

This is also a fairly large group and vary from partial to complete occlusion.

Table No. 3

Sr. No.	Conditions.	No. of Patients.
1.	Tubal blockage at various sites.	40
2.	Peritubal and periovarian adhesions.	50
3.	Altered tubal and ovarian relationship due to extensive omental and bowel adhesions, mainly due to PID mild to severe.	30
4.	Endometriosis	20
5.	Pelvic tuberculosis.	20
6.	Pelvic Tumours.	10

TREATMENT

Some patients who were treated only with medications such as:

Tab Augmentin	375 mg	TDS	For ten days.
Tab. Fasigyn	300 mg	BD	For ten days.
Tab. Proxen	500 mg	BD	For ten days.
Anti-Tuberculous Regimen Tab. Myrin	1 Tab.	QDS	For Three months.
Tab. Tebrazid	2 Tab.	BD	For six months.
For Endometriosis: Cap. Danazol	200 Mg	TDS	For 4 to 6 months.

Some patients needed surgical treatment in the form of laparotomy, Excision of tubal, ovarian, uterine and bowel adhesions. Mobilization of all the pelvic organs. Restoring their normal anatomical relationship.

Correction of Retroverted uterus by Ventrosuspension and Palication of both Round ligaments. Diathermy to all endometriotic implants in the pelvis.

Tubal Surgery:

Results depend upon the extent of tubal damage (30 to 70%).

The procedures carried out such as;

End to end Anastomosis.

Salpingolysis.

Utero-tubal Anastomosis.

Salpingostomy.

The result of surgical treatment depends on the condition of the pelvic organs.

Prognosis of tubal surgery is certainly far superior if done with operating microscope.

GROUP 3 (250 PATIENTS)

MALE FACTOR

This group includes;

Table No. 4

Sr. No.	Conditions	No. of Patients.
1.	Infection of urogenital tract.	88
2.	Low Sperm count.	60
3.	Low sperm molality	50
4.	Pre-mature ejaculation	10
5.	Azoospermia.	40
6.	Retrograde ejaculation (History)	2

TREATMENT

1.	Antibiotics	Depends upon culture and sensitivity
2.	Testosterone (Rebound phenomena) improve sperm counts (Essential for spermatogenesis)	(Proviron 25 mg TDS for 2 to 3 months.)
3.	Vitamin A and E for three months	
4.	Clomiphene Citrate. 50 to 100 mg	2 to 3 months.

5.	Toxoforin Tabs	For three months.
6.	Inj. Pergonal and Inj. Profasi.	For 2 to 3 months.
7.	A.I.H. (Poor results.)	
8.	A.I.D. (not acceptable in our religion and social set up)	

GROUP 4 (60 PATIENTS)

MISCELLANEOUS GROUP

This group includes more than one pathology, such as;

Table No. 5

Sr. No.	Conditions.	No. of Patients
1.	Pelvic endometriosis of various degrees.	20
2.	Pelvic tumours such as uterine myoma, ovarian tumours.	15
3.	Hydatid cyst.	5
4.	Alongwith other pathology form group 1, group 2 and group 3 as well.	20

TREATMENT

In this group majority of cases needed medical as well as surgical treatment in the form of laparotomy, myomectomy, removal of ovarian tumours and removal of Hydatid cyst.

RESULTS

Table No. 6

Group	Total No. of Patients.	Conception achieved.	Percentage
1.	310	170	54.84%
2.	160	79	49.38%
3.	250	75	30%
4.	60	25	41.66%

Overall conception achieved 44.743%

DISCUSSION

It has been observed from our study that both results and prognosis depend upon the etiology

Different groups have proved to have different prognosis as given in Table No. 6.

Most important aspect of treatment is that these couples should be referred, at the earliest opportunity, to a consultant who has special interest and training in this field of medicine.

As one can see our overall success rate is 44.743%, which is very encouraging in this complex problem.

It is very difficult to compare various studies, because different factors are involved in different cases. As it is quite obvious in our study as well, the success rate achieved is variable from one group to the other.

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