

Pcod –The Main Culprit In Subfertility

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Abstract-

Introduction- According To WHO ¹Infertility, Whether Male Or Female, Is Defined As The Inability Of A Couple To Achieve Conception Or Bring A Pregnancy To Term After A Year Or More Of Regular, Unprotected Sexual Intercourse, And There Is No Other Reason(Such As Breastfeeding Or Post-Partum Amenorrhea).The Term Is Generally Used To Denote That The Couple Has Reduced Chances To Conceive As Compared To General Population.

According To WHO Causes Of Subfertility Can Be Broadly Divided Into Female Factor 40%, Male Factor 40%-45%,Combined 15-20% ,Unexplained 15%, In Female Factor-Ovulatory Cause 20-40%,Endometriosis 10%,Tubal Factor 20-40%,Advanced Age 20-50%,Luteal Phase Defect 8-10%,Endometrial Factor 10%,Fibroids 5%.²

MATERIAL AND METHOD- A Prospective Cross Sectional StudyWas Done From August 2013-August 2015 At Department Of Obstetrics And Gynecology,Jnmc,Avbrh,Dmims

100 Consecutive Couples Attending Fertility Clinic AtAVBRH Were Considered For The Purpose Of Study, After Informing Them And Taking Written Consent From Them, For Becoming The Part Of The Study

All Couples Were Investigated Using The Established Clinic Protocol.

Detail Physical Examination Was Carried Out.

.Per Abdomen- Abdomen Palpation Was Done For The Presence Of Organomegaly Or Any Abdominal Swelling, Lump.

Per Speculum- Inspection Of Vaginal Mucosa, Cervix And For Any Abnormal Discharge.

Per Vaginum Examination-

Uterus And Cervix Were Palpated Bimanually For Their Position, Consistency, Size And Mobility.

FornicesWere Examined For Presence Of Inflamed Tube And Ovary, A Tumor Or Other Abnormality.

USG Was Done To Find Out Any Structural Defect, Cyst, Fibroid.

Chlamydia (CAT ANTIBODIES) Were Tested In The Patients A Clotted Blood Sample Was Obtained From The Patients. Serum Samples Were

Assayed For Chlamydia IgG Antibody Employing The Single-Antigen

Hormonal Profile-

On Day 3 Of Menses LH, FSH, AMH, THYROID, PROLACTIN Levels Were Done.

Hysterosalpingography- It Was Done On Day9-10 For Every New Patient To Find Out The Block In Tubes And FTR Was Also Performed To Open The Block At The Same Sitting.

Diagnostic Laparoscopy- It Was Performed To Find Out Whether It Was Uterine Cause, Ovarian Cause, Tubal Cause, Cervical Cause.

And The Endometrium Was Sent For TB PCR.

Results-

The Present Study Included 100 Sub Fertile Couples Out Of Which 76% Were Primary Infertility Cases And 24% Were Secondary Infertility Cases.

32% Of Women Belonged To The Age Group Of 21-25 Years, 46% Belonged To The Age Group Of 26-30

Years, 11% Belonged To The Age Group Of 31-35 Years, 11% Women Belonged To Age Group Of More Than 35 Years Of Age.

39% Women Had Received Only Primary Education, 29% Women Had Received Secondary Education Whereas 32% Women Had Received Secondary Education.

54% Of Women Were Home Makers, 25% Were Manual Labourer, 21% Were Office Workers

In The Present Study According To Kuppaswami Scale 6% Cases Were From Class 1, 29% Cases Were From Class 2, 41% Cases Were From Class 3, 23% Cases Were From Class 4 And 1% Belonged To Class 5.

In The Present Study Since Our Set Up Is In Rural Area Maximum Patients Belonged From Rural Area 53% And 47% Belonged To Urban Area.

38% Patients Had Duration Of Infertility Between 2-3 Years, 28% Had Between 3-5 Years, 24% Patients Had Duration Between 5-10 Years And 10% Patients Had Duration More Than 10 Years. Mean Duration Was 5.84-5.90 Years

According To The History Taken From Patients 77% Cases Had Regular Menstruation, 23% Patients Had Irregular Menstruation Out Of Which 15% Patients Had Oligomenorrhea, 5% Patients Had Polymenorrhea, 3% Patients Had Menorrhagia.

17% Patients Had History Of Dysmenorrhoea And 4% Patients Had History Of Mid Cycle Pain (I.E. At Time Of Ovulation).

3% Of Females Also Presented With History Of Substance Abuse.

In The Present Study 20% Cases Had Chlamydia Antigen Titres Positive, 6% Cases Had History Of Hypothyroidism, 5% Cases Had History Of Acute/Chronic Pelvic Inflammatory Disease, 3% Cases Had HTN Or DM, 1% Case Had Hyperthyroidism, 1% Patient Had History Of Surgery (I.E. MRM) And Had Also Received Chemotherapy

In The Present Study There Were 24 Cases Of Secondary Infertility Out Of Which 4 (16.66%) Cases Had History Of Normal Vaginal Delivery, 4 Cases (16.66%) Had History Of LSCS, 14 Cases (58.33%) Had History Of Abortions, 2 Cases (8.33%) Had History Of Ectopic Pregnancy

In The Present Study 55% Cases Did Not Use Any Method Of Contraception, 14% Patients Practiced Natural Method, 12% Cases Had History Of Use Of Contraceptive Oral Pills, 17% Cases Used Barrier Method, 2% Cases Had Used Copper T.

In The Present Study, After Physical Examination Of All The Women Patients, None Had Abnormal Secondary Sexual Characters, 21% Patients Had Abnormal Waist Hip Ratio (Raised/Less), 16% Cases Had Acne, 2% Cases Had Galactorrhea, 12% Cases Had Hirsutism And 9% Cases Had Acanthosis Nigricans, And 2% Cases Had Thyroid Enlargement .

In The Present Study, After Taking Height And Weight Of Every Patient BMI Was Calculated At The First Visit, 79% Patients Fell Under Normal BMI Range (18.5-25), 21% Patients Had Abnormal BMI Range, Out Of Which 12% Patients Fell Under Overweight Category (25-30), 6% Patients Fell Under Class 1 Obese Category (30-35), 2% Patients Fell Under Category Of Class 2 Obese Category (Bmi-35-40), While 1 Patient Was Underweight (Bmi-16-18.5).

In The Present Study After Per Abdomen Examination 1 Patient Had Palpable Mass Of 16 Weeks Size, While 99% Cases Were Detected With No Abnormality

In The Present Study, Per Speculum Examination Was Done For Every Patient 79% Patients Had Normal Finding, 11% Cases Had Vaginitis, 5% Cases Had Cervicitis (Erosion Or Nabothian Follicle Was Present), 5% Cases Had Both Vaginitis And Cervicitis, 1% Patient Had Gartner Cyst.

In The Present Study After Bi Manual Examination, 89% Patients Had Anteverted Uterus, 11% Patients Had Retroverted Uterus. 2% Cases Had Enlargement In The Size Of Uterus, 1% Cases Had Fullness In The Fornices, 65 Cases Had Restricted Mobility, 2% Cases Had Cervical Stenosis.

In The Present Study All The Women Had Done Ultrasound 66% Cases Were Detected With No Abnormality, While 24% Cases Were Found To Have Polycystic Ovaries, 2% Cases Had Fibroid, 7% Cases Had Ovarian Cyst, 1% Case Had Asherman Syndrome.

In The Present Study Hormonal Profile Was Done On Day 3 Of Menses, Luteinizing Hormone Was Done For All The Patients Out Of Which 86 Patients Had Normal Value, 13 Patients Had Raised Value And 1 Patient Had Less Value.

Follicle Stimulating Hormone Was Done For All The Patients Out Of Which 96 Patients Had Normal Value, 3 Had Raised Value And 1 Had Less Value.

Thyroid Stimulating Hormone Was Done For All The Patients 98 Patients Had Normal Value (Some Patients Were Already On Thyroid Drugs), 2 Patients Had Raised Value. Anti Mullerian Hormone (AMH) Was Done For 69 Patients, Out Of Which 46 Patients Had Normal Value, 17 Patients Had Raised Value And 6 Patients Had Less Value. Prolactin Was Done For 40 Patients, 38 Patients Had Normal Value, 2 Patients Had Raised Value.

In The Present Study Out Of 100 Patients Only 52 Patients Had Underwent Hysterosalpingogram In Which 37 Cases (71.15%) Had No Abnormality, 11 Cases (21.15%) Were Found To Have Unilateral Block, 4 Cases (7.69%) Had Bilateral Block.

In The Present Study Out Of 100 Patients, 51 Patients Had Undergone Hysteroscopy, 45% Patients Had No Abnormal Finding, 3.92% Cases Were Found To Have Septum Or Synechia, 1.96% Cases Had Abnormal Endometrium, 1.96% Cases Had Structural Defect, 3.92% Cases Had Fibroid, 1.96% Patients Had Tubular Cervix With Pin Point Os And 1.96% Patients Had Cervical Stenosis

In The Present Study, 51 Patients Had Undergone Laparoscopy, Ovarian Factor Contributed To 37.2% Of Total Factors Out Of Which Polycystic Ovaries Were Found In 12 Cases, Ovarian Cyst Was Found In 6 Cases, T. O. Mass Was Seen In 1 Case. Uterine Factor Was Seen In 7.84% Of All The Factors Fibroid Was Seen In 2 Cases, Structural Defect Was Found In 2 Cases, Tubal Factor Contributed To 25.4% Of All The Factors Unilateral Block Was Seen 6 Cases, Bilateral Block Was Seen In 5 Cases And Hydrosalpinx Was Seen In 2 Cases, Peritoneal Factor Was Found To Be 12 % Of All The Factors, 8 Cases Were Seen Having Adhesions, 2 Cases Had Endometriosis, 2 Cases Were Found To Have Tubercle And Endometrium Was Sent For TB PCR.

In The Present Study Out Of 100 Subfertile Couples, 15% Factor Was Contributed By Males, 23% Cases Had Abnormal Menstrual Cycle, 14% Cases Had Lower Genital Tract Infection, 18% Cases Had Abnormal Endocrine Profile, Ovarian Factor Contributed To 35% Out Of Which In Total 25% Cases Of Polycystic Ovaries Were Noted, 9% Cases Having Ovarian Cyst, 1% Case Had To Mass.

Uterine Factor Contributed To 7%, Fibroid Was Seen In 3% Of Cases, Structural Defect Was Seen In 3% Of Cases, 1 Patient Had Asherman Syndrome.

Tubal Factor Contributed To 28%, Unilateral Block Was Seen In 17% Of Cases, Bilateral Block Was Seen In 9% Of Cases, Hydrosalpinx Was Seen In 2% Of Cases.

Peritoneal Factor Contributed To 12% Of All The Factors, Adhesions Were Noted In 8% Of Cases, Endometriosis In 2% Of Cases And Tubercles Were Seen In 2% Of Cases.

Cervical Factor Contributed To 3% Of All The Factors, 1 Case Of Tubular Cervix With Pin Point Os Was Noted And 2% Cases Of Cervical Stenosis Were Noted.

conclusion

in the present study 25% patients were found to have pcod, and lean pcod was also commonly seen. thus, further studies can be conducted on a large sample size, as PCOD is more common further focus can be done on PCOD related to infertility.

According To **WHO** ¹ Infertility, Whether Male Or Female, Is Defined As The Inability Of A Couple To Achieve Conception Or Bring A Pregnancy To Term After A Year Or More Of Regular, Unprotected Sexual Intercourse, And There Is No Other Reason (Such As Breastfeeding Or Post-Partum Amenorrhea). The Term Is Generally Used To Denote That The Couple Has Reduced Chances To Conceive As Compared To General Population.

According To WHO, Between 2 And 10% Of Couples Worldwide Are Unable To Conceive A Child And A Further 10-25% Experience Secondary Infertility I.E. Are Unable To Conceive A Second Or Subsequent Child. About 15% Of Couples Of Childbearing Age Seek Medical Help For Infertility, Usually After About Two Years Of Failing To Conceive.

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Couples With **Primary** Infertility Have Never Been Able To Conceive, While On The Other Hand, **Secondary** Infertility Means Difficulty In Conceiving After Having, Already Been Pregnant In The Past.

The Aim of The Present Study Was To Find Out That In How Many Patients Pco Was The Factor Responsible For Subfertility At Achara Vinobha Bhav Rural Hospital

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Distribution Of Cases According To The Factors Responsible For Subfertility.

Factor	Total %	Primary (N=76)	Secondary (N=24)
Male	15%	14	1
Ab.Menstruation	23%	16	7
Lower Genital Tract Infection	14%	14	9
Ab.Endocrine Profile	18%	13	5
Ovarian Factor	35%		
PCOD	25%	20	5
OV.CYST	9%	7	2
TO MASS	1%	1	0
Uterine Factor	7%		
FIBROID	3%	3	0
S.DEFECT	3%	2	1
ASHERMAN SYNDROME	1%	0	1
Tubal Factor	28%		
UNILATERAL BLOCK	17%	12	5
BILATERAL BLOCK	9%	7	2
HYDROSALPINX	2%	2	0
Peritoneal Factor	12%		
ADHESION	6%	6	2
ENDOMETRIOSIS	1%	1	1
TB/TUBERCLE	2%	2	0
Cervical Factor	3%		
PIN POINTED OS	1%	1	0
CERVICAL STENOSIS	2%	2	0

Discussion-

On Analyzing The Type Of Sub Fertility In The Present Study Out Of 100 Cases Of Subfertility, Primary Were 76%

And Secondary Were 24% Which Was Similar To Study Done By Dugnian Et Al³ 77% Primary And 23% Secondary Cases.

The Duration Of Primary Infertility In The Study Conducted By Sumita et Al⁴ The Majority Of Women, 38 Cases (57.57%) Were Between 2 To 5 Yrs.Of Their Marriage, 16 Cases (24.24%) Between 6 To 9 Yrs., 8 Cases (12.12%) Were Married For 10yrs.Whereas In Ours 65 Cases Had Duration Of 2-5years And 25 Cases Had Duration Of 6-9 Years And 10 Cases Had Duration More Than 10years.Thus, Majority Of Infertile Couple Start Worrying About Their Inability To Conceive Within 1-5 Years Of Marriage And Decide To Get Themselves Investigated.

In Our Study 20% Of Cases Were Found To Have Chlamydial Infection, Study Done By Malik Et Al⁵ Corresponded With Ours 28.1%.

In The Present Study On Day 3 Of Menses Hormonal Analysis Was Done Which Included Lh, Fsh, Thyroid, Prolactin, Amh And 45% Had Abnormal Hormonal Profile Which Was Similar To The Study Done By SirdahmmetAl⁶ Who Reported 55% Abnormal Hormonal Profile

In The Study Conducted By Gabos Et Al⁷ Unilateral Block Was Seen In 13.7% Of Patients While Bilateral Block Was Seen In 8.5% Of Patients, Siegler Et Al⁸ Reported 15.2%

Cases Had Unilateral Block And 8.5% Cases Had Bilateral Block. Hutchins Et Al Reported 12.5% Patients Had Unilateral Block And 2.7% Patients Had Bilateral Block Which Was Similar To Our Study In Which Out Of 100 Patients, 51 Patients Underwent HSG, 21.5% Women Had Unilateral Block And 5.88% Patients Had Bilateral Block

In The Present Study 51 Patients Underwent Laparoscopy, 12 Cases Were Seen Of PCOD Which Corresponded To The Study Of Sajida Et Al¹² Cases And Chakarborti Et Al⁹ 11.4 % Cases ,Ovarian Cyst Was Found In 6 Cases Which Was Similar To Study Done By ChakarbortiEt Al⁹ 8% Cases .Unilateral Block Was Seen In 5 Cases Which Was Similar To The Study Done By ChakarbortiEt Al⁹ 5% Cases . Bilateral Block Was Seen In 5 Cases Whereas Sajida Et Al¹⁰ Also Reported With 10 Cases. 2 Cases Were Reported To Have Endometriosis Sajidaet Al Reported With 5 Cases.2 Cases Had Myoma Which Was Similar To The Study Conducted By SajidaEt Al 4 Cases. Since India Has High Incidence Of Tuberculosis Pid, Adhesions And Tubercles Was Seen In 10 Cases Which Was Corroborating To The Study Done By Sajida Et Al 7 Cases And ChakarbortiEt⁹ Al 8.3 Cases Thus Considering Laparoscopy As A Gold Standard Test To Find Out The Etiology

Ovarian factor	Chakarborti et al ¹⁷³ (1991)	Wasimtalib et al ¹⁷⁴ (2003)	Talatnaz et al ¹⁷⁵ (2009)	Azziz N et al ¹⁷⁶ (2010)	Present study
PCOD	11.4%	28%	8.82%	15.6%	25(71.4%)
OVARIAN CYST	8%	6%	5%	6.3%	9(25.7%)
TO MASS	7.7%	-	-	-	1(2.8%)
TOTAL	27.1%	34%	11.8%	21%	35(100%)

In the present study ovarian factor contributed to 35% this correlates with the study done by Wasimtalib et al 34% and Chakarborti et al 27.1%.of the total ovarian cause pcod was the main cause contributing to 71.4% of total ovarian factor and 25.7% cases had ovarian cyst and only 1 case was found to have TO mass i.e 2.8%

conclusion

in the present study 25% patients were found to have pcod,and lean pcod was also commonly seen.thus,further studies can be conducted on a Large sample size ,As PCOD is more common further focus can be done on PCOD related to infertility.

Reference-

- 1)Cooper TG, Noonam E, Eckardstein S, et al. World Health Organization Reference Values For Human Semen Characteristics. Human. Reprod. Update 2010;16(3):231-45

- 2) Forti G, Krausz C. Clinical review 100: Evaluation and treatment of the infertile couple. *J Clin Endocrinol Metab.* 1998;83(6):4177-88
- 3) Duignan NM. One thousand consecutive cases of diagnostic laparoscopy. *Obstetgynecol Br C wealth* 2000;79(8):1016-1024
- 4) Sumitadutta, Ranjitguha .a clinic anatomical study on the etiological factors pertaining to primary infertility in females using some common investigative procedures. *J anat. Soc. India* 56(2) 14-17 (2007)
- 5) Abida malik, S. Jain, S. Hakim, I. Shukla & M. Rizvi. Chlamydia trachomatis infection and infertility. *Indian J Med Res* 123, June 2006, pp 770-775
- 6) Mahmoud Mohammed Sirdah, Abdelnasser Kassem A bushahla, Bahaa Yonsif Ghalaeni, Ahemed Gamel A buramadan, etiological risk factors for subfertility among Palestinian women in gaza; *The journal of biomedical research* 2013, 27(2):127-134
- 7) Gabos P (1976) A comparison of hysterosalpingography and endoscopy in evaluation of tubal function in infertile women. *Fertil Steril* 27:238–242
- 8) Siegler AM. Hysterosalpingography. *Fertil Steril.* 1983;40(2):139–58. [[PubMed](#)]
- 9) Chakraborti DK, Sharma V. The Infertile woman : A study of 120 cases *J Indian Med Assoc*, 1991;89(2);31-32
- 10) Sajida Parveen, Majidah Khanam. Role of combined diagnostic laparoscopy and simultaneous diagnostic hysteroscopy for evaluation of female subfertility factors. *Journal of surgery Pakistan (International)* 2010;15(1):44-47.
- 11) Wasim Talib et al. infertile female ; laparoscopic evaluation , professional medical Journal Dec 2007;14(4)562-66.