

Infertility : A Case Study

CASE OF INFERTILITY

A 29 yr old woman and her husband presented with a primary infertility of 2 years. They had been married for 3 years and 4 mths but had been using condoms earlier. Since last 2 years they had been doing regular intercourse without any contraception.

The lady had no significant previous history of any surgery or prolonged illness. Her periods occurred every 35-40 days, normal flow and no dysmenorrhea. Only for the last 6 mths periods were delayed by 2mths or more and at times she had to resort to a hormonal withdrawal bleed. No history of any intermenstrual or postcoital bleeding. She was not taking any medications at present. She only gave a history of 5kg weight gain over the last 6 mths. She was a non smoker, non alcoholic.

Her husband had no significant previous history. He was a non smoker non alcoholic. By profession he was an investment banker.

EXAMINATION

On examination her BMI was 29kg/m^2 . She had slight acne on her face and her chest. Abdominal examination was normal and no masses were palpable. Her per speculum and bimanual examination was normal.

Investigations:-

Day 3 FSH 2.6IU/L

Day 3 LH 7.8IU/L

Free Testosterone 5.2 nmol/L

Day 21 Progesterone 12nmol/L

A Transvaginal Scan as in Fig:1

CONCLUSION

The cause of infertility was anovulation due to Polycystic Ovarian Syndrome(PCOS).

To be diagnosed with PCOS by the Rotterdam criteria, a woman must have two of the following three manifestations:

- Irregular or absent ovulation
- Elevated levels of androgenic hormones,
- And/or enlarged ovaries containing at least 12 follicles each(as on TVS)

Anovulation was confirmed by a low serum progesterone levels. PCOS was suggested by her altered FSH/LH ratios of >1 , androgenic levels of hormones, oligomenorrhea, acne and her TVS scan.

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PCOS is one of the commonest causes of infertility and is present in about 25-30% of females of reproductive age group. But a good fraction of couples presenting with infertility have multifactorial causes hence a basic infertility workup for all these couples is mandatory, which involves

- Semen analysis
- Hysterosalpingogram(tubal patency tests)

MANAGEMENT

The drug of choice for such cases is clomiphene citrate. A dose of 100mg was given from day 5 of periods for 5 days. Follicular monitoring was done to check ovulation and the couple was advised intercourse during period of follicular maturation and rupture. A serum progesterone was checked after one week of follicular rupture to check the response of drug dosage and any need of increase in subsequent cycle. The lady did not ovulate with a dose of 100mg so 150mg was given in subsequent cycle with which she ovulated. She became pregnant in second cycle of 150mg CC.

COMMENTS

- Irregular periods are mostly due to PCOS
- The syndrome should be diagnosed keeping all criteria into mind
- A basic infertility workup should be done for all infertile couples
- Clomiphene Citrate is the drug of choice
- CC should be given for a max. of 6 cycles
- If the woman does not ovulate with oral drugs induction with gonadotropins and thereafter IVF should be considered.
- A rubella immunization is on the cards if immunological tests suggest no previous exposure.
- Starting folic acid for all couples planning pregnancy should be a regular feature.



Fig 1:TRANSVAGINAL ULTRASOUND SCAN