

# Basic Infertility Services For Women



**Infertility** is defined as the failure of a couple to achieve a pregnancy after 12 months or longer of regular unprotected intercourse or after 6 months for women:

- over age 35
- with oligo-ovulatory/amenorrhea
- with a history of known or suspected uterine or tubal disease or endometriosis
- with a partner known to be subfertile

Both partners should be evaluated concurrently (American Society for Reproductive Medicine).

## Subjective Findings for Women

### History

- Reproductive life plan
  - Do you have any children now?
  - Do you want to have (more) children?
  - If yes, how many children would you like to have and when?
- Sexual health assessment
  - 5 P's: partners, practices, pregnancy intention, protection from STDs/STIs, past STD/STI history
  - Dyspareunia – insertional or deep pelvic?
  - Use of lubricants – water soluble or other?
- Complete medical history
  - Previous surgeries and hospitalizations
  - Current medications/allergies
  - Tobacco, drug, and alcohol use
  - Childhood disorders including mumps or congenital adrenal hyperplasia
  - Medical conditions associated w/ reproductive failure – thyroid disorders, diabetes, PCOS/hirsutism, endocrine disorders, endometriosis
  - Cervical cancer screening/results
  - Family history of infertility
- Reproductive history
  - How long has client been trying to achieve pregnancy?
  - Gravidity/parity/pregnancy outcomes/complications
  - Age at menarche
  - Cycle length and characteristics including dysmenorrhea
  - Previous contraception
  - History of PID, STDs/STIs
  - Coital frequency and timing
  - Fertility awareness and signs that accompany ovulation
- Review of Systems
  - Thyroid disease
  - Pelvic/abdominal pain
  - Galactorrhea
  - Hirsutism
- Depression screening
- Occupation, and exposure to environmental hazards

#### References:

- Centers for Disease Control and Prevention. Providing Quality Family Planning Services. Recommendations of CDC and the U.S. Office of Population Affairs. MMWR. April 25, 2014.
- Curtis, M. et al. (2014). Glass' Office Gynecology. Seventh Edition. Philadelphia: Wolters Kluwer Health.
- Practice Committee for the American Society for Reproductive Medicine. Diagnostic evaluation of the infertile female: a committee opinion. *Fertil Steril*. 2015;103(6):e44-e50.
- Practice Committee for the American Society of Reproductive Medicine. Use of clomiphene citrate in infertile women: a committee opinion. *Fertil Steril*. 2013;100(2):341-348.
- Sandhu, R. J., Wong, T. H., Kling, C. A., & Chohan, K. R. (2014). In vitro effects of coital lubricants and synthetic and natural oils on sperm motility. *Fertility and Sterility*, 101(4), 941-944.

## Objective Findings for Women

### Physical Exam

- Height, weight, BMI, waist circumference
- Blood pressure
- Blood sugar screening
- Skin/Hair: axial or facial hirsutism, male pattern hair distribution and alopecia, striae, acanthosis nigricans (insulin resistance)
- Thyroid examination: note enlargement/tenderness
- Breasts: note signs of galactorrhea
- Abdominal exam: mass, tenderness
- Signs of androgen excess
- Pelvic exam
  - Uterine size, shape, mobility, position; note fixed, immobile uterus
  - Adnexal mass/tenderness
  - Cul-de-sac mass, tenderness, nodularity; note nodularities along utero-sacral ligaments on bimanual/rectal exam
- Vagina: abnormality, discharge
- Cervix: friability, mucopurulent discharge

### Assessment for Women

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Infertility/sub-fertility | <input type="checkbox"/> Decreased ovarian reserve | <input type="checkbox"/> Tubal /peritoneal factors |
| <input type="checkbox"/> Ovulatory dysfunction     | <input type="checkbox"/> Anatomical causes         | <input type="checkbox"/> Male factor               |

### Plan of Care for Women

- Laboratory Assessment
  - CBC, ESR
  - TSH, prolactin
  - STI screening if indicated
  - Testing of ovarian reserve (if indicated) - Serum FSH/estradiol level cycle days 2-4 or AMH level may be drawn at any time in the menstrual cycle. If abnormal – refer.
  - Tubal patency – If a woman is ovulatory, or has tubal factor infertility risk factors (previous ectopic, PID, history of GC/Chlamydia) an HSG should be considered to evaluate tubal patency. If abnormal – refer.
  - If a patient has amenorrhea, serum FSH and E2
- Referral for adjuvant testing (if warranted)
  - Endometrial biopsy (EMB) transvaginal pelvic ultrasound , serum progesterone level to assess ovulatory function laparoscopy, clomiphene citrate
- Treatment
  - Clomiphene citrate is the initial treatment choice for most anovulatory or oligo-ovulatory infertile women. It is taken on cycle days 5-9 of spontaneous or induced menses. Dosing begins at 50 mg and ovulation should be documented by menstrual calendar, ovulation kit, or serum progesterone level on day 21. If anovulatory, titrate to 100 mg. If there is no pregnancy after 4 cycles, the client should be referred for further evaluation.

### Counseling Tips

- Counseling tips for clients with no apparent cause of infertility
  - Educate about “peak” fertility days - clear, stretchy cervical mucus
  - Vaginal intercourse every 1-2 days following end of menses; avoid water soluble lubricants
  - Discourage ETOH, recreational drugs, smoking. Offer nicotine replacement and/or group therapy.
  - Encourage healthy weight of BMI > 19 and < 30
  - Discourage excessive caffeine intake (< 3 cups daily)
  - Preconception care advice including use of folic acid, immunizations, medications, and blood glucose control
- Emotional support
- Financial costs of planned infertility services

Some of above labs are beyond the scope of Title X agencies: TSH, prolactin, cycle day 3 FSH mIU/mL, AMH, rubella titer