For patients struggling to conceive, the first step on the path to parenthood is identifying all the factors that might be contributing to a couple’s infertility. The specialists at Shady Grove Fertility are committed to making the diagnostic process as streamlined, efficient, and personalized as possible to ensure patients receive the best care. This is done through a basic infertility work-up that includes testing of both the male and female partner.

**THE 4 KEY TESTS**

There are four simple tests used to assess the key components of conceiving and sustaining a pregnancy—egg, sperm, and female anatomy.

- **Day 3 blood hormone levels**
  - Follicle-stimulating hormone (FSH)
  - Estradiol (E2)
  - Anti-Müllerian hormone (AMH)
  - Luteinizing hormone (LH)
  - Thyroid stimulating hormone (TSH)

- **Day 3 Transvaginal Ultrasound**
  - Antral follicle count (AFC)

In the majority of cases, this information is enough to indicate the cause of infertility and an appropriate treatment plan. Other tests such as a postcoital test, clomiphene citrate challenge test, and even routine laparoscopy are no longer indicated because the results do not change the treatment plan.

**DETERMINE**

**Is the patient ovulating?**

**What is the ovarian reserve?**

**TESTS**

**Day 3 Blood Hormone Levels:**

- Follicle-stimulating hormone (FSH)
- Estradiol (E2)
- Anti-Müllerian hormone (AMH)
- Luteinizing hormone (LH)
- Thyroid stimulating hormone (TSH)

**Day 3 Transvaginal Ultrasound**

- Antral follicle count (AFC)

**Evaluation of Menstrual History**

**WHAT THE RESULTS TELL US**

Low ovarian reserve may be indicated by elevated FSH or E2 levels or decreased AMH and can be evaluated via transvaginal ultrasound.

**DETERMINE**

**What is the count and quality of sperm?**

**TESTS**

**Semen analysis**

**WHAT THE RESULTS TELL US**

Low sperm count, low motility, and abnormal morphology all inhibit the sperm’s ability to penetrate the egg for conception.

**DETERMINE**

**Are the Fallopian tubes open and normal?**

**Is the uterus a normal shape?**

**TESTS**

**Transvaginal ultrasound**

**Hysterosalpingogram (HSG)**

**WHAT THE RESULTS TELL US**

Fallopian tube blockages or the presence of hydrosalpinx (fluid-filled tube) can be identified via HSG. Uterine shape abnormalities or anomalies such as fibroids, polyps, or scar tissue can be assessed.
MEDICAL UPDATE

Know When to Suggest an Infertility Evaluation

**Women age 35 or younger.** Suggest a work-up after the couple has been having unprotected intercourse without success for 1 year.

**Women age 35 to 40.** Suggest a work-up after the couple has been having unprotected intercourse without success for 6 months.

**Women age 40 or older.** Suggest a work-up immediately due to a significant loss of ovarian reserve common in this age group.

**Women with known risk factors for infertility.** Suggest a work-up for women with irregular menstrual cycles or known risk factors for infertility, such as endometriosis, a history of pelvic inflammatory disease, bilateral tubal occlusion, or partners with severe male factor infertility.

LEARN ABOUT 4 BASIC TESTS TO EVALUATE SUSPECTED INFERTILITY