

the menstrual cycle and serum anti-müllerian hormone (AMH). These screening tests combined with age of the female partner and antral follicle counts measured by ultrasound can identify diminished ovarian reserve and provide information on the urgency to initiate treatment. AMH and antral follicle counts are also used to determine starting doses of gonadotropins for fertility treatments. These markers of ovarian reserve, however, do not predict the likelihood of pregnancy and live birth.

Endocrine Tests In women with irregular menses, serum TSH, prolactin, and androgens should be measured to identify other causes for anovulation.

Semen Analysis (see Chap. 391) The semen sample is collected after 2–7 days of abstinence and provides an assessment of sperm count, motility, morphology, volume, and pH. Although there is significant overlap between semen parameters of fertile and infertile men, those with abnormal sperm parameters based on the WHO criteria (*oligoasthenozoospermia* is defined as sperm counts <15 million/mL, motility <40%, and normal morphology <4%) should have a physical exam and further endocrine (serum follicle-stimulating hormone [FSH], LH, prolactin, and thyroid-stimulating hormone [TSH]) and genetic evaluation (karyotype and Y chromosome microdeletion).

Genetic Screening All couples can be offered preconception genetic screening based on ethnicity, family history, or common autosomal recessive conditions.

Of note, diagnostic laparoscopy, postcoital test, endometrial biopsy, thrombophilia, and immunologic testing and karyotype are not indicated as part of the initial workup of infertility.

■ COUNSELING AND TREATMENT

Preconception Counseling All patients seeking fertility care should be provided with preconception counseling. This includes counseling about eating disorders or lifestyle modifications for weight management as obesity in women is associated with an increase in