Gino is a 26-year-old female-to-male (FTM) transsexual patient who is seeking a new primary care provider. He has been on injectable testosterone therapy for the last six months and would like to continue on this treatment prior to planned sex reassignment surgery (SRS) next year.

Ruth is a 65-year-old male-to-female (MTF) transsexual patient with obesity, pre-diabetes, and hyperlipidemia who needs primary care for her multiple medical issues. She has been on estrogen and anti-androgen therapy for two years.

What do you need to know about Gino and Ruth’s hormone therapy?

Hormone therapy for transgender patients improves quality of life and mental well-being. The goal of transgender hormone therapy is to reduce endogenous hormone levels and their associated sex characteristics while replacing them with hormones of the preferred sex using doses and therapies typical for hypogonadal treatment.¹

For Gino, testosterone therapy can be given parenterally or transdermally to achieve testosterone levels in the normal male range (i.e. 300 to 1000 ng/dL).² Hematocrit, lipid profile, and liver function tests should be measured every three months during the first year of treatment.

For Ruth, therapy will include both an anti-androgen and estrogen. Anti-androgen therapy reduces Ruth’s endogenous testosterone levels so that estrogen can have its maximal effect and lower doses can be used.³ Anti-androgen therapy can be pharmacologic (typically spironolactone) or surgical (orchietomy).

Estrogen may be given orally (conjugated estrogens, 17 β estradiol) or transdermally; serum estradiol levels should approximate the mean daily level for a reproductive-age woman (i.e. less than 200pg/mL).² Ruth should have her estradiol, prolactin, and testosterone levels checked yearly; serum potassium should be monitored related to spironolactone. Estrogen may have a favorable effect on Ruth’s lipid profile, but her blood pressure, weight, and glucose levels should be followed carefully. Supra-physiologic doses of estrogen should be avoided as they can increase Ruth’s risk for thrombembolism, coronary artery or cerebrovascular disease, and liver dysfunction.³

What other health maintenance should Gino and Ruth be aware of?

Health maintenance screening depends on the patient’s hormonal and surgical history. The basic idea is “screen what you have”—patients should be screened based on their anatomy. For example, since Gino has not undergone any surgical intervention, he should undergo cervical and breast cancer screening with the same frequency as non-transgender females.

Current guidelines suggest that Ruth undergo breast cancer screening as recommended for biological women.¹ SRS for MTF patients does not remove the prostate. Thus, the risks and benefits of prostate cancer screening should be discussed with Ruth.

In general, for patients who are on consistent cross-hormone therapy, the risk of osteoporosis is felt to be low. However, for patients who are not on cross-hormone therapy consistently, the risk of bone loss may be greater. Should there be risk factors for osteoporosis, the Endocrine Society recommends obtaining bone mineral density studies.

What types of issues should you consider for Gino’s upcoming surgery?

Gino should complete at least 12 months of hormone therapy and consult with his primary care physician and mental health provider prior to SRS.² Full discussion of SRS is beyond the scope of this article. Current guidelines recommend that Gino consider total hysterectomy and oophorectomy as part of his surgery in order to eliminate the risks of gynecologic disease and cancer.

Are Gino and Ruth at risk for other medical or mental health conditions?

The stress associated with fear, discrimination, and violence leaves the transgender community vulnerable to mental health issues and drug and alcohol abuse. Rates of depression, trauma, eating disorders, anxiety, smoking, and domestic violence are higher in the transgender community, and suicide risk is increased by 30%.³

Transgender individuals are also at a higher risk for HIV and sexually transmitted infections (STIs)—MTFs more so than FTM. The prevalence of HIV among MTF persons is approximately 27.7%. Additionally, MTF individuals are also more likely to engage in risky sexual behaviors, including unprotected receptive anal continued on page 2
intercourse, multiple casual partners, and sex work. The sharing of needles to inject drugs or hormones is another risk factor for HIV and STIs.

What are other issues that could face Gino or Ruth?

Under the Affordable Care Act, sex discrimination and discrimination based on HIV/AIDS status is prohibited. However, insurance plans may still exclude coverage for transition-related care, including hormones and/or surgeries.

While the social landscape is constantly changing—with 16 states and DC passing laws to prohibit discrimination in the workforce and businesses—transgender individuals still face severe social stigmatization. These concerns should be included in the social history, and consultation with social work may be necessary to ensure safe work and home environments.

References