

## TRANSGENDER CARE: SAMPLE HORMONE REGIMENS

### Male-to-Female:

#### Estrogens:

Oral estradiol (e.g., Estrace®), 6 - 8 mg PO or sublingual qD in divided doses; *or*  
Oral conjugated estrogens (e.g., Premarin®), 5 mg PO qD in divided doses; *or*  
Transdermal estradiol (e.g., Vivelle-Dot®), two - 0.1 mg patches changed twice weekly; *and*

#### Anti-androgen:

Spirololactone (e.g., Aldactone®), 200 - 400 mg PO qD in divided doses.

Typically I start with an “average” dosage of oral estradiol (e.g., 2 mg TID). Six to eight weeks later, I add spironolactone, 100 mg BID. Subsequently I add more estrogen or spironolactone as needed to achieve desired feminization, to eliminate spontaneous erections (a useful index of free testosterone), and to achieve measured serum free testosterone levels in the normal female range. Ordinarily I don’t check serum estradiol levels; if obtained, I like to see levels approximately one-third to one-half of the normal female midcycle peak.

Most of my patients receive oral estradiol. I typically prescribe transdermal estradiol for patients over age 40, for smokers, and for those with other cardiovascular risk factors. I do not ordinarily prescribe injectable estrogen, progesterone, or synthetic progestins for my male-to-female patients.

After orchiectomy or sex reassignment surgery, anti-androgens can be discontinued and estrogen can be decreased to one quarter to one half of the preoperative dosage.

### Female-to-Male:

Testosterone enanthate (e.g., Delatestryl®) or cypionate (Depo-Testosterone®), 75 - 100 mg IM q week or 150-200 mg IM q 2 weeks; *or*  
Transdermal testosterone patch (Androderm®), 5 – 7.5 mg, changed daily; *or*  
Transdermal testosterone gel (Androgel®), 5 – 10 mg, applied daily.

Injecting smaller doses of testosterone weekly often results in better subjective satisfaction. Cessation of menses and masculinization are much slower with transdermal testosterone and transdermal testosterone is much more expensive.

After ovariectomy, androgen can often be decreased to one-half or less of the pre-op dosage.

## SUGGESTED LABORATORY STUDIES

### Male-to-Female:

Free testosterone, fasting glucose, liver function tests, and complete blood count – pretreatment, at 6 and 12 months, and yearly thereafter. An estradiol level may occasionally be helpful if feminization appears to be inadequate. Prolactin levels are obtained pretreatment and at 1, 2, and 3 years. If hyperprolactinemia does not occur during this time, no further measurements are necessary.

### Female-to-Male:

Fasting lipid profile, liver function tests, and complete blood count – pretreatment, at 6 and 12 months, and yearly thereafter. Trough testosterone levels may occasionally be useful, but normal male levels of testosterone vary widely. Patients who have not had hysterectomy need periodic Pap smears and possibly ultrasound examinations to detect endometrial hyperplasia. Hysterectomy and ovariectomy are recommended after satisfaction with testosterone therapy has been demonstrated.