Contraceptive Considerations for TNGD AFAB Patients

Concurrent Testosterone Use

- Testosterone alone is not a contraceptive.
- Breakthrough ovulation and pregnancy have been reported in patients even while amenorrheic or oligomenorrheic from current testosterone therapy.
- Concurrent testosterone gender-affirming hormone therapy and use of all hormonal contraceptive methods are currently considered safe.
- The efficacy and effectiveness of hormonal and non-hormonal contraceptives do not appear to be different or negatively impacted or altered with the use of testosterone therapy.
- There is a current lack of research regarding comorbidity risk stratification in persons on testosterone using contraception.
- Refer to the U.S. Medical Eligibility Criteria (MEC) for contraceptive use for guidelines and adverse outcomes for utilization of contraceptives in patients with comorbidities.
- Patients on testosterone may have vaginal atrophy, so it is recommended that clinicians pretreat with two to four weeks of vaginal estrogen for IUC insertion, based on patient preference.

Side Effects

- There does not appear to be an increased risk of venous thromboembolism (VTE) in persons on testosterone on combined hormonal contraceptives.
- There has been no compelling evidence to suggest that progestins alone pose a clinically significant increased risk of thromboembolic disease.
- Androgenic progestins (norethindrone, levonorgestrel, and gestodene) are more likely to increase low-density lipoprotein and decrease high-density lipoprotein concentrations.
- Other progestins (norgestimate and drospirenone) have the opposite effect, but it is not clear how clinically significant this is, especially with concurrent testosterone use.
- This may be worth discussing with patients who have or are at risk of lipid disorders.
- Androgenic progestins are more likely to cause side effects such as oily skin, acne, and facial hair growth.
- It is unknown if and how hormonal contraceptive progestins interact with gender-affirming testosterone therapy and how they may affect masculinization.
- CHCs can lower androgen levels produced by the ovaries and increase sex hormone binding globulin, but current evidence suggests that the levels of estrogen used in CHCs do not significantly affect testosterone levels in patients using testosterone.

Menstrual Suppression

- There is no method that can guarantee suppression of menses.
- Menstrual suppression can take up to one year to achieve.
- It may take trial and error to find the best method for menstrual suppression for each patient.
- There is no evidence for the superiority of one particular method over the others for preventing breakthrough bleeding.
- Patients should be counseled that complete amenorrhea may not be achievable in everyone and that breakthrough bleeding and ovulation is possible with each method.
- Along with hormonal contraceptive methods, consistent testosterone use can reduce the instances of menstruation and breakthrough bleeding/spotting.
- Testosterone use alone may still include cyclic bleeding or spotting.
- Progestin contraceptive subdermal implants and IUDs may cause frequent and/or prolonged bleeding.
- Using 2 to 3 months of CHCs may provide stabilization of the endometrium in people using a progestin-based long-acting reversible contraceptive.
- Norethindrone acetate, while not an approved form of contraception, is a viable solution for menstrual suppression in the short term for immediate bleeding cessation, in combination with CHCs and/or testosterone.

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Method	Mode of Delivery	Dose Frequency	Contains estrogen	Contains progesterone	Can be used for menstrual suppression	Possibility of spotting/ bleeding	Possible effect on cramping	Breast tissue tenderness	Easily concealed	Can self-discontinue	Efficacy (perfect/typical)
COC	Oral pill	Daily	✓	✓	✓	✓	Lower	More common at start	Variable	✓	99/91
POP	Oral pill	Daily	✗	✓	✓	✓	Lower	More common at start	Variable	✓	99/91
Patch	Transdermal delivery	Weekly	✓	✓	✓	✓	Lower	More common at start	Variable	✓	99/91
Ring	Vaginal Insertion	Monthly	✓	✓	✓	✓	Lower	More common at start	Variable	✓	99/91
DMPA	Injection	Monthly (subq) or quarterly (IM)	✗	✓	✓	✓	Lower	Possible	✓	✓ (with washout)	99/94
Implant	Subdermal insertion	Every three years	✓	✓	✓	✓	Lower	Possible	✓	✗	99/99
IUC: Copper	Uterine insertion	Every ten years	✗	✗	✗	✓	Increase	None	✓	Rarely	99/99
IUC: Progestin	Uterine insertion	Every three to eight years	✗	✓	✓	✓	Lower	Possible	✓	Rarely	99/99
Sterilization	Abdominal surgery	N/A (permanent)	✗	✗	✗	✗	None	None	✓	✗ (permanent)	99/99
Diaphragm	Vaginal Insertion	N/A (must be replaced every two years)	✗	✗	✗	✗	None	None	Variable	✓	99/88
Internal Condoms	Vaginal insertion	N/A	✗	✗	✗	✗	None	None	✗	✓	95/79
External Condoms	Penile cover	N/A	✗	✗	✗	✗	None	None	✗	✓	95/82
EC: Ulipristal acetate	Oral pill	Once, with prescription	✗	✗	✗	✓	Increase	Possible	Variable	✓	85/85
EC: Lovenorgestrel	Oral pill	Once, OTC	✗	✓	✗	✓	Increase	Possible	Variable	✓	75-89

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