Does Gender-Affirming Hormone Therapy Increase One's Risk for Thrombosis?
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When I was in medical school, I learned to ask about and counsel on thrombosis risk when prescribing oral contraceptives. However, although I have referred patients for gender-affirming hormone therapy (GAHT), I haven't discussed the possibility of thrombosis for these patients. But that has now changed, since I read an article that is being early released in Pediatrics this month (10.1542/peds.2020-023549): "Thrombosis Risk in Transgender Adolescents Receiving Gender-Affirming Hormone Therapy."

Dr. Eric Mullins and colleagues studied a retrospective cohort of 611 13-24-year-olds who received GAHT (176 identified as female, 416 as male, and 19 as non-binary or gender non-conforming). Some of these patients had historical risk factors for thrombosis, including obesity, smoking tobacco, migraine, family member with thrombosis or inheritable thrombosis risk (e.g., factor V Leiden).

As some background, in GAHT, transgender females are usually treated with estrogen, sometimes in conjunction with a testosterone antagonist (e.g., spironolactone) and gonadotropin-releasing hormone agonist. Transgender males are usually treated with testosterone analogs. The only studies of thrombosis with GAHT have been done in adults. Adolescents may be at increased risk of thrombosis since they start GAHT earlier and are on it for longer periods of time.

You will be reassured to know that no patients in this retrospective cohort had any thromboembolism events. Approximately 3% of patients were referred for hematology evaluation before initiation of hormone therapy, and thromboprophylaxis was recommended for 3 (0.5%) who had a family history of thrombosis and a laboratory-identified risk factor for thrombosis. Hormone levels were monitored for all patients during GAHT.

We have learned in the past few years that GAHT can have an important positive impact with regard to self-esteem and mental health for patients who are transgender or gender non-conforming. I have now added questions about personal and family history of thrombosis risk as I am discussing the potential of GAHT with patients who are interested, but I can also now reassure them that we know how to manage this risk.

- Body Dissatisfaction and Mental Health Outcomes of Youth on Gender-Affirming Hormone Therapy
- Factors Associated With Age of Presentation to Gender-Affirming Medical Care
- Ethical Issues in Gender-Affirming Care for Youth