

Obesity, ovarian mass, vaginal bleeding and hypothyroidism in a 5-year-old girl.

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Introduction:

Van Wyk-Grumbach Syndrome (VWGS) is a constellation of symptoms including precocious puberty without adrenarche, delayed bone age, ovarian cysts, and hypothyroidism.

Case report:

We report here a five-year-old girl who presented for evaluation of obesity, vaginal bleeding, and abdominal distention. Her HtSDS = -1.3 and BMI SDS = 1.5. A large abdominal mass was palpable. She had no breast development or pubic hair. She was started on L thyroxine 75 mcg OD. Table 1 shows the labs pre- and post one month of thyroxine therapy.

• Discussion:

- Significant regression of the ovarian masses occurred as early as 1 month after replacing thyroid hormone in this girl with VWGS. The etiology of her hypothyroid status was autoimmune.
- Given the presence of significant ovarian masses, a surgical emergency such as ovarian torsion or rupture must be ruled out.
- Even when the diagnosis of VWGS is confirmed, practitioners must be watchful to consider surgical intervention in the presence of uncontrolled vaginal bleeding, hemodynamic instability, or failure of regression of ovarian cysts with exogenous thyroid hormone replacement.

	At presentation	After levothyroxine initiation
TSH	2288 uIU/ml	2.43 mIU/ml.
FT4	0.09 ng/dl	2.6 ng/dl
Anti TPO	600 U/ml	
anti-thyroglobulin antibody	296 U/ml	
LH	0.11 mIU/ml	
FSH	1.2 mIU/ml	
Ovarian size	The right = 8x7.5x10.5 cm and the left = 4.5 x8.5 x 7 cm.	right = 5.3 x4.3 x 3.1 cm and left = 4.4x 3.5x 2.9.
Uterus	Diffuse mural vaginal thickening and endo-vaginal collection and bulky uterus.	The uterine body measured 4.7 x 1.7 cm.

Conclusion:

VWGS should be considered in the differential diagnosis of young girls with ovarian masses with vaginal bleeding and hypothyroidism. The prognosis is good with thyroid replacement therapy.

