OBESITY, VAGINAL BLEEDING AND OVARIAN MASS IN A 5-YEAR-OLD FEMALE GIRL WITH AUTOIMMUNE HYPOTHYROIDISM

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CASE PRESENTATION

•We report a five -year-old girl who presented for evaluation of **Obesity**, **Abdominal distension**, and **Vaginal bleeding** for two days.

• There was **No** history of local trauma or vaginal discharge associated with the vaginal bleeding and No suspicion of abuse.

EXAMINATION

• There was **No** purpura or bleeding from other sites.

• Her **HtSDS** = **-1.3 SD** and

• **BMI** SDS = **+ 1.5 SD.**

• Large **Abdominal ma**ss was palpable.

• There was **No** hepatomegaly, splenomegaly or lymphadenopathy.

• She had **No** breast development nor pubic hair

INVESTIGATIONS

• **High TSH** = 2288 uIU/ml
• **Low FT4** = 0.09 ng/dl
• **LH** =0.11 mU/ml
• **FSH** = 1.2 mIU/ml
• **Anti TPO** = 600 U/ml
• **Anti-thyroglobin** Ab = 296 U/ml.

• **CT of the abdomen** showed Bilateral adnexal multi-locular masses. The right = 8x7.5x10.5 cm and the left = 4.5 x8.5 x 7 cm. There were no enhancing solid components identified.

•There was a diffuse mural vaginal thickening and endo-vaginal collection and bulky uterus.

• L thyroxine was prescribed.

• After a month on thyroxine therapy, FT4 =2.6 ng/dl, TSH = 2.43 mIU/ml.

• Her Ultra-sonographic evaluation showed marked **Regression** of the two adnexal lesions, right = 5.3 x4.3 x 3.1 cm and left = 4.4x 3.5x 2.9 cm. The uterine body measured 4.7 x 1.7 cm.

• After 2 months of therapy, **complete regression** of the masses occurred.

DISCUSSION

•**Van Wyk-Grumbach Syndrome (VWGS)** is a constellation of symptoms including Precocious Puberty without adrenarche, Delayed bone age, Ovarian cysts, and Hypothyroidism.

• High TSH could produce FSH and LH like activity leading to multiple ovarian cysts.

•Significant regression of the ovarian masses occurred as early as one month after replacing thyroid hormone and normalization of TSH 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.

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.

REFERENCES

• Durbin KL, Diaz-Montes T, Loveless MB. Van wyk and grumbach syndrome: an unusual case and review of the literature. J Pediatr Adolesc Gynecol 2011 ; 24(4): 93-6.

• V. Pant , S. Baral. Van Wyk Grumbach syndrome with precocious puberty and ovarian cysts: Value of thyroid function tests. Journal of Pediatric Surgery Case Reports 43 (2019) 32–34

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