similar condition in her family, she has three siblings all are well. She developed T2DM with at the age of 14. She was started on Metformin 2 gram daily and they pioglitazone 30 mg was added when she was 16 years. She never had menarche. The clinical examination revealed an adolescent girl with normal BP 106/68 mmHg, and BMI 19.6 kg/m². She scored 24 on Ferriman–Gallwey hirsutism scoring system. She had severe acanthosis nigricans on both axillae. She also had back and upper limbs hyperpigmentation. Lab tests revealed normal thyroid function tests, prolactin, cortisol, DHEA-S, and 17 hydroxy progesterone. Fasting glucose 7.2, insulin 123 μU/ml (2.6-24.9), c-peptide 964, HbA1c 8.2%. Total testosterone 24.61 nmol/l (0.069-2.715), SHBG 184.9 nmol/L, and Free testosterone index 13.31 (0.51-6.53). Her LH 8.9 and FSH 4.7. Radiological investigations revealed polycystic ovaries on pelvic ultrasound. MRI abdomen showed normal adrenals, and mildly enlarged ovaries with peripherally located follicles consistent with polycystic ovarian syndrome. The patient was started in Diane-35 (cyproterone acetate and ethinyl estradiol) oral pills. She started to have menarche three months after using Diane-35. Her Total testosterone had dropped from 24.61 to 1.69 nmol/L (0.069-2.715), SHBG 579 nmol/L, and Free testosterone index 0.29 (0.51-6.53). She reported that the hirsutism is getting less than before starting the treatment. Conclusion: Primary amenorrhea might be a manifestation of in HAIR-AN syndrome due to severe hyperandrogenism. The management of such condition is challenging. In addition to controlling the metabolic parameters, combined oral pills with antiandrogen effect might be effective.

Neuroendocrinology and Pituitary CASE REPORTS IN UNUSUAL PATHOLOGIES IN THE PITUITARY II Oral Contraceptive Pills Mask an Aggressive Crooke’s Cell Pituitary Adenoma Helen Prathiba Gnanapragasam, MBBS, Amrutha Idupuganti, MD, Abhihana Karunakaran, MBBS. University at Buffalo, Buffalo, NY, USA. MON-255 Background Crooke’s cell tumors are rare and aggressive forms of pituitary adenomas. This variant of Cushing’s disease requires prompt diagnosis to avoid life-threatening complications. We report a unique case of Crooke’s cell tumor with longstanding history of irregular menstrual cycles, undiagnosed and later presented as acute unilateral ptosis and diplopia due to aggressive tumor invasion.
Clinical Case 23-year-old female presented to the ER with facial swelling, left eye droop and diplopia for 3 days. She had a past medical history of oligomenorrhea and hirsutism which was normalized by oral contraceptive pills (OCP) - a combination of ethinyl estradiol and drospirenone for the last 3 years. Years prior, workup of her oligomenorrhea showed normal androgenic profile with normal DHEA-S, testosterone and 17-OH progesterone. Current exam was also significant for elevated blood pressure 200/110 mmHg, BMI 37, pigmented abdominal striae and terminal hair over her chin. Labs remarkable for hypokalemia K+ 2.7 mmol/L (3.5-5.3), elevated AM cortisol 51 mcg/dL (4-20), low TSH 0.152 mU/ml (0.4-5.0), low IGF-1 170 ng/mL (222-566) and FSH 1.4 mU/ml (1.0-9.0), with normal prolactin 24.3 ng/mL (<0.5-25) and free T4 0.87 ng/dL (0.8-1.8). MRI brain showed 2.8 cm homogenous enhancing soft tissue mass involving the central skull base, sphenoid sinus, sella, suprasellar cistern, and parasellar regions; displacing the optic chiasm, and invading the cavernous sinuses bilaterally and orbital apices. Post trans-sphenoidal surgery (TSS) of the pituitary mass, her left eye ptosis and diplopia resolved. Post-op MRI showed subtotal resection of the extra-axial enhancing abnormality at the central skull base with extension to multiple other anatomic spaces. Pathology read consistent with aggressive Crooke’s cell adenoma, showing invasive biologic behavior without an elevated proliferation index with positive ACTH immunohistochemistry supportive of corticotroph cell adenoma. Post-op ACTH level 73 pg/mL (6-50) and cortisol 12.5 mcg/dL (4-20), while on dexamethasone. Repeat TSS was performed for residual adenoma. Cortisol remains elevated at 15.7 mcg/dL despite high dose dexamethasone taper by the neurosurgery team for post-op development of right eye ptosis. She is currently awaiting proton beam radiation therapy.
Conclusion Crooke’s cell tumors are an aggressive form of pituitary adenoma for which early diagnosis is crucial for its prognosis. Our case highlights the importance of maintaining a wide differential in evaluating young women with menstrual irregularities and to include screening for Cushing’s syndrome. Empiric treatment with OCPs can mask symptoms in the earlier course of Cushing’s disease as in our patient, causing recognition only after presentation with significant tumor growth. Earlier detection could have prevented adenoma invasion and potential neurological sequelae.

Thyroid BENIGN THYROID DISEASE AND HEALTH DISPARITIES IN THYROID I Assessing Content Validity of the Graves’ Ophthalmopathy Quality of Life Questionnaire (GO-QOL) in the United States Marius N. Stan, MD1, Robert Holt, PharmD, MBA2, Lissa Padnick-Silver, Ph.D1, Saba Sile, MD2, 1Mayo Clinic, Rochester, MN, USA, 2Horizon Therapeutics plc, Lake Forest, IL, USA. SAT-424 Introduction: Thyroid eye disease (TED) is an autoimmune condition that negatively impacts patient’s quality of life (QOL). The GO-QOL questionnaire was originally developed in the Netherlands to quantify how TED and treatments affect patient QOL. This questionnaire includes eight questions each on visual functioning and appearance related QOL; the items are answered on a 3-point Likert scale and transformed to a 0 (worst) to 100 (best) scale. Though widely used and validated outside the US, the questionnaire has not been validated in the United States (US). Here we examine the content validity.
Methods: Patients with moderate or severe TED were identified using an existing market research patient