characteristics analysis, basal serum LH was the best parameter to differentiate CPP from PT (area under the curve 0.797–0.926). ULH levels at ≥ 1.13 IU/L and ≥ 1.52 provide optimal sensitivity (72.3 and 68.1 %, respectively) and specificity (85.7 and 100 %, respectively). Combined ULH level ≥ 1.13 IU/L with ULH: UFSH ≥ 0.17 increased specificity from 85.7 to 92.9 % for predicting a positive GnRH agonist test. (peak LH ≥ 5 IU/L) **Conclusions:** First morning voided urinary Gn levels measurement is a highly potential method for the diagnosis of CPP in girls due to its good correlation with GnRH agonist test. Further study in a larger number of patients with close monitoring of clinical outcome is required before recommending as a standard investigation in CPP.

Adrenal

ADRENAL MEDICINE — CLINICAL APPLICATIONS AND NEW THERAPIES

The Effects of Crinecerfont (NBI-74788), a Novel CRF1 Receptor Antagonist, on Adrenal Androgens and Precursors in Patients with Classic Congenital Adrenal Hyperplasia: Results from A Multiple-Dose Phase 2 Study

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Introduction: Classic congenital adrenal hyperplasia due to 21-hydroxylase deficiency (21OHD CAH) is a rare autosomal recessive disease that results in impaired cortisol synthesis and excess androgen production. Compounds that inhibit adrenocorticotropic hormone (ACTH) release could reduce adrenal androgen production and thus the amounts of exogenous glucocorticoids needed to decrease these androgen levels. This study evaluated the effect of crinecerfont (NBI-74788), a novel, non-steroidal, and selective corticotropin-releasing factor-1 (CRF1) receptor antagonist on adrenal androgens and precursors in adults with 21OHD CAH.

Methods: This open-label, multiple-dose study enrolled men and women (18–50 years old) with 21OHD CAH. A sequential-cohort design evaluated 4 crinecerfont oral dosing regimens: 50 mg QHS (Cohort 1); 100 mg QHS (Cohort 2); 100 mg QD (Cohort 3); and 100 mg alternative dosing (Cohort 4). Each regimen was administered for 14 consecutive days. ACTH, 17-hydroxy-progesterone (17OHP), and androstenedione (A4) were measured serially over a 24-hour period, at baseline and after 14 days of dosing.

Results: Analyses included 23 participants: Cohort 1 (4 women, 4 men: mean age 31.1 years); Cohort 2 (5 women, 2 men: mean age 32.9 years); and Cohort 3 (3 women, 5 men: mean age 30.9 years). Cohort 4 is ongoing. At baseline, median plasma ACTH, serum 17OHP, and serum A4 levels were as follows: Cohort 1 (ACTH, 151 pg/mL; 17OHP, 5352 ng/dL; A4, 270 ng/dL); Cohort 2 (ACTH, 232 pg/mL; 17OHP, 12821 ng/dL; A4, 597 ng/dL); and Cohort 3 (ACTH, 470 pg/mL; 17OHP, 6451 ng/dL; A4, 299 ng/dL). After 14 days of once-daily crinecerfont 50 mg, Cohort 1 patients had median percent reductions from baseline in plasma ACTH (-54%), serum 17OHP (-60%), and serum A4 (-21%). Median percent reductions were generally larger with 100 mg in Cohort 2 (ACTH, -67%; 17OHP, -75%; A4, -47%) and Cohort 3 (ACTH, -69%; 17OHP, -55%; A4, -43%), consistent with a dose-related response. Adverse events were mostly mild; no clinically significant findings from routine laboratory tests, vital signs, or electrocardiograms were noted.

Conclusions: Results of this Phase 2 study of crinecerfont, a novel, orally administered, selective CRF1-receptor antagonist, indicated clinically meaningful reductions of elevated ACTH, 17OHP, and A4 in adults with 21OHD CAH after 14 days of treatment. Further studies are warranted to evaluate the effects of chronic crinecerfont therapy on maintenance of adrenal steroid production, clinical endpoints of disordered steroidogenesis, and reductions in GC exposure in both adult and pediatric patients with 21OHD CAH.

Thyroid

THYROID CANCER CASE REPORTS II

Reactive Thyroid C-Cell Hyperplasia or Medullary Thyroid Cancer in a Patient with Nodular Thyroidopathy. May the Calcitonin Measurement in Fine-Needle Aspirate Washout Fluid of the Healthy Lobe Help to Define These Conditions?

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Background: Serum basal calcitonin (bCT) is used as a biomarker of medullary thyroid carcinoma (MTC) but bCT can also be elevated in patients with hypercalcemias, hypergastrinemias, thyroiditis, neuroendocrine tumors, renal end-stage kidney disease, obesity and cigarette smoking. The application of bCT and calcitonin measured in the FNA washout fluid sample (FNA-CT) for screening certain patients with nodular thyroidopathy can be controversial. *Case:* A 44 yo patient presented with elevated bCT level - 24pg/ml (N for male <18). He had a morbid obesity (BMI-45kg/m2) and thereby received GLP-1 receptor agonists Liraglutide 18 mg in total throughout one month. The ultrasound thyroid examination showed 2 nodules in the right lobe: 11mm and 9 mm (EU-TIRADS 2 and 4). Thyroid nodules were evaluated by fine needle aspiration biopsy (FNAB) which revealed benign colloid nodules (Bethesda II). Following the most updated ATA guidelines, to accurately diagnose MTC we performed FNA-CT measurement. The concentration from both nodules exceeded the upper reporting range of 2000 pg/ml. The patient