with exogenous rhGH and there is also in vitro evidence showing a more efficient signal transduction through this exon 3 deleted isoform. Some studies have found that patients with acromegaly harboring the exon 3-deleted genotype may have a higher prevalence of diabetes and hypertension. **Hypothesis and Objective:** Patients with active acromegaly harboring the exon 3-lacking GHR genotype may have more echocardiographic abnormalities than those who are homozygous for the exon 3 containing genotype. **Patients and Methods:** This is a cross-sectional study of patients with active acromegaly, defined by an IGF-1 level > 1.3 times the upper limit of normal (x ULN), who underwent transthoracic echocardiography. Exon-3 GHR genotype was determined by PCR using previously described sense and antisense primers. **Results:** The cohort consisted of 28 patients, 54% female, with a mean age of 51 ± 12 years. Mean disease duration at the time of echocardiographic examination was 4.48 ± 4.7 years; median basal GH and IGF-1 were 12 ± 26 ng/mL and 2.4 ± 1.04 x ULN. The prevalence of hypertension and diabetes were 43% and 36%, respectively. Fifty three percent of the patients were homozygous for the exon 3-containaing genotype (+3/+3), 18% were homozygous for the exon 3-lacking genotype (-3/-3) and 29% were heterozygous (+3/-3). Clinical and biochemical features did not differ between patients with the different GHR genotypes, except for hypertension that was more prevalent in the +3/+3 genotype group (60% vs 23%, p= 0.04). The frequency of the different echocardiographic parameters was similar among groups (left ventricular hypertrophy 33% vs 15%, p= 0.27; diastolic dysfunction 47% vs 31%, p= 0.39; subclinical systolic dysfunction 42% vs 54%, p= 0.54; left ventricular ejection fraction 59±10% vs 60±16%, p= 0.83); aortic valve abnormalities 19% vs 15%, p=0.63; mitral valve abnormalities 46% vs 15%, p=0.07). **Conclusions:** Echocardiographic abnormalities in patients with active acromegaly do not differ among patients with the different GHR exon 3 genotypes. The clinical spectrum of acromegaly varies considerably. Although such variability is usually related to the severity of the hypersomatotropinemia, in many patients this is not the case.

Neuroendocrinology and Pituitary

PITUITARY TUMORS

Giant Prolactinomas: An Experience From South India

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Giant prolactinomas are large lactotroph adenomas, defined as those with maximum dimension of >4cm. They constitute <5% of all prolactin secreting tumors, and are more frequently seen in men. They present with features of hyperprolactinemia and hypopitutarism and are responsive to dopamine agonist therapies. In the current study we have shared our experience on management of giant prolactinomas over the last 15 years. We collected clinical data retrospectively from medical records of patients with giant prolactinoma managed at our institute over the last 15 years. This study describes the symptomatology, tumor characteristics and response to therapy. Our study included 21 patients with 15 males and 6 females. The mean age of presentation was 32 ± 10.3 years, ranging between 10 to 53 years. Vision defect was the predominant complaint (57%, 12 patients), followed by headache (52%, 11 patients). Erectile dysfunction was a presenting feature in 13% of men (2 patients) and amenorrhea/galactorrhea in 33% of women (2 patients). Seizure was seen in 10% of the patients (2 patients) and 10% (2 patients) were diagnosed with giant prolactinoma on evaluation for primary infertility. Tumor associated pituitary dysfunction manifested as hypogonadism in 67%, 14 patients, central hypothyroidism in 38%, 8 patients, and hypocortisolism in 1 patient. The median maximum tumor dimension was 4.4 cm with median basal PRL of 7168 ng/ml. Five patients underwent debulking surgery (24% of the patients) prior to endocrinology referral for indications such as apoplexy/raised intracranial tension. All patients received cabergoline and a mean dose of 2.1 ± 1.7 mg/week (range, 1-7 mg/week) was prescribed to attain a median nadir prolactin level of 48 ng/ml over a median period of 4 months (range, 1-40 months). The follow-up MRI data was analysed for 13 patients. Tumor shrinkage of >50% from the baseline was seen in all but 1 patient (92%) and 2 patients had disappearance of radiologically detectable tumor. Although giant prolactinomas have a greater tumor burden than the more common macroprolactinomas, the responsiveness to dopamine agonist therapy is excellent and surgical therapy is reserved for any exceedingly large tumors to relieve compression on vital structures.

Neuroendocrinology and Pituitary

PITUITARY TUMORS

Hypercoagulability in ACTH-Dependent Cushing Syndrome

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Introduction: ACTH-dependent Cushing syndrome (CS) is associated with hypercoagulability; however, the incidence and timing of thrombosis during evaluation and management of CS is unclear.
Objective: To evaluate the incidence and timing of thrombotic events in patients with ACTH-dependent CS following diagnosis and management.
Methods: We performed a retrospective, longitudinal study of patients with ACTH-dependent CS seen at Stanford University Health Care from 1998 to 2020. Thrombotic events — deep vein thrombosis (DVT), pulmonary embolism (PE), cerebral vascular accident (CVA), and myocardial infarction (MI) — were recorded between diagnosis and 12 months following therapeutic intervention.
Results: Of 108 patients with ACTH-dependent CS, 97 (89.8%) were women, and the mean age at diagnosis was 43.0 years (± 15.7 years). Sixty-eight (63%) patients had hypertension, 38 (35.2%) had diabetes mellitus, and 11 (10.2%) were active smokers. Of the 108 subjects, 97 (89.8%) had Cushing Disease (CD) and 11 (10.2%) had ectopic CS. Of the 97 patients with CD, 38 (39.2%) underwent inferior petrosal sinus sampling (IPSS), 59 (60.8%) underwent transsphenoidal surgery (TSS), 19 required repeat TSS (19.6%), and 15 underwent TSS and bilateral