elevated at 2.34 nmol/L and 0.25 nmol/L. A 24-hour urine collection included urine volume of 3500 ml, urine creatinine 7.2 mmol/day, elevated urine norepinephrine 1199 nmol/day, elevated urine epinephrine 888 nmol/day, and normal urine dopamine 335 nmol/day. Parathyroid hormone and calcitonin were normal at 0.4 pmol/L and 4.8 pmol/L, respectively. Plasma aldosterone was normal at 87 pmol/L and plasma renin normal at 3.5 ng/L. Doxazosin 1 mg daily was initiated and she had clinical improvement next day and came off ECMO. Her ejection fraction improved to 55% subsequent week. She had retroperitoneoscopic adrenalectomy two weeks later with full recovery.

Conclusion: Classic Takotsubo's cardiomyopathy is a possible presentation of pheochromocytoma with rapid resolution with alpha blockade.

Healthcare Delivery and Education

EXPANDING CLINICAL CONSIDERATIONS FOR PATIENT TESTING AND CARE

Prevalence and Characteristics of Patients With Primary Severe Hypercholesterolemia in a Multidisciplinary Healthcare System in the Midwest.

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MON-LB309

Background

Severe hypercholesterolemia (SH) phenotype includes all subjects with LDL-c of 190 mg/dL or more regardless of cause. Those with SH have up to 5-fold long-term risk for coronary artery disease (CAD).

Objectives

To assess prevalence, characteristics & different aspects of clinical care for patients with primary SH in a multidisciplinary healthcare system in the Midwest.

Subjects & methods

A retrospective, record-based, cross-sectional study was conducted using datasets from unique electronic health records of living patients presenting at a U.S. metropolitan healthcare system from 01/01/2013 until 08/31/2019. Cases were identified as SH if maximum LDL-c during the timeframe was 190 mg/dL or more. Subjects not meeting this criterion were used as controls. Comorbidities considered included CAD, congestive heart failure (CHF), diabetes mellitus (DM), hypertension (HTN), obesity & smoking. Lipid lowering therapies including statin, ezetimibe, & PCSK9I use were also assessed. Statistical analyses, including t-tests & logistic regression, were conducted to identify differences between cases & controls.

Results

After exclusion of subjects with secondary dyslipidemia, 224,920 records were used for analysis. Of these, 3.0% (6755) had SH. Those with SH were older by an average of about 3.5 years as compared to the control group. The most populous age-gender subgroup was females aged 40-75 years (35.2%). In the absence of any of the 5 comorbidities (CAD, CHF, DM, HTN, obesity), patients with SH were more likely to have established care with primary care (95% CI = 65%-69%) compared to control (95% CI= 56.5% - 57.2%). Patients with SH had more comorbidities with overall comorbidity represented by their higher Hierarchical Condition Category (HCC) score (P=0.001). HTN (P=0.000), premature CAD (P=0.000) & obesity (P=0.017) were all slightly more prevalent in cases than control. Mean arterial BP, systolic BP, diastolic BP & lipid parameters (LDL-c, total cholesterol, HDL, TG & Lipoprotein(a)) were higher in patients with SH (P= 0.000) compared to control. Patients with SH were treated more with statins or ezetimibe compared to control (P=0.000). However, of SH subjects, only 61% were found to have been treated with statin & only 26% were treated with high intensity statin. In the absence of any of the 5 comorbidities, these are lower (52% & 16% respectively) for statin use & 3.5% for the use of Ezetimibe. Persistent elevation of LDL-c to 190 mg/dL or more was present in 31% (2102) of SH cases.

Conclusion

Prevalence of primary SH is 3% in our population. Patients with SH exhibit greater likelihood for comorbidities, including those related to CVD. Most patients with SH are seen in the primary care setting rather than by endocrinology or cardiology. The use of statins (generally), high intensity statins, and ezetimibe in those with SH is more than control but still below that recommended by guidelines.

Cardiovascular Endocrinology

ENDOCRINE HYPERTENSION AND ALDOSTERONE EXCESS II

Basal Contralateral Aldosterone Suppression Is Rare in Lateralized Primary Aldosteronism and Can Be Useful in Predicting Surgical Outcome

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SUN-LB96

Background: Adrenal venous sampling (AVS) is performed to distinguish between unilateral or bilateral source of aldosterone in primary aldosteronism (PA). Unilateral aldosteronomas should lead to suppression of renin and contralateral (CL) aldosterone secretion, assessed by the CL suppression ratio. We recently found that CL aldosterone suppression was relatively rare using the ratio of basal aldosterone concentration of the opposite adrenal vein/periphery (A_{OPP}/A_P) in contrast to the traditional cortisol-corrected aldosterone ratio ($(A/C)_{OPP}(A/C)_P$). Pathology studies showed frequent zona glomerulosa (ZG) hyperplasia adjacent to a dominant aldosteronoma, which could

also indicate probable ZG hyperplasia in the CL adrenal. The ratio of basal CL suppression could be a usefull parameter to predict cure following unilateral adrenalectomy (UA), but controversy remains in the literature.
Objectives:
1. To evaluate the prevalence of basal CL suppression using the A_{OPP}/A_P ratio as compared to the $(A/C)_{OPP}/(A/C)_P$ ratio at previously established cut-offs.
2. To determine the best cut-off to predict clinical and biochemical surgical cure in two Canadian referral centers.
3. To compare the accuracy of the A_{OPP}/A_P ratio to the basal lateralization ratio (LR) and the post-ACTH LR in predicting the surgical outcome.
Methods: 330 patients with PA and successful bilateral simultaneous basal and post-ACTH stimulated AVS (selectivity index >2 basally and >5 post-ACTH) were included; 124 patients found to be lateralized underwent UA. The follow-up data were evaluated for clinical and biochemical cure at 3 and 12 months using the PASO criteria.
Results: Using A_{OPP}/A_P and $(A/C)_{OPP}/(A/C)_P$ at the cut-off of 1, the prevalence of CL suppression is 6% and 45%, respectively. The median CL suppression ratio is 2.3 (1.3-5.1) in lateralized cases of PA using A_{OPP}/A_P. Using ROC curves, the A_{OPP}/A_P ratio is associated with clinical cure at 3 and 12 months and biochemical cure at 12 months. $(A/C)_{OPP}/(A/C)_P$ is associated with biochemical cure only. The cut-offs for A_{OPP}/A_P offering the best sensitivity and specificity for clinical and biochemical cures at 12 months are 2.15 (Se 63% and Sp 71%) and 6.15 (Se 84% and Sp 77%), respectively. Basal LR and post-ACTH LR are associated with clinical cure but only the post-ACTH LR is associated with biochemical cure.
Conclusions: Basal CL suppression defined by the A_{OPP}/A_P ratio is rare and incomplete compared to the traditional $(A/C)_{OPP}/(A/C)_P$ ratio in lateralized cases of PA. This may reflect the frequent micronodular hyperplasia adjacent to dominant aldosteronomas and possibly in the CL adrenal. Basal CL aldosterone suppression may predict clinical postoperative outcome, but with modest accuracy.

Tumor Biology

ENDOCRINE NEOPLASIA CASE REPORTS III

A Rare Case of Atypical Teratoid/Rhabdoid Tumor of Sellar Region in an Adult

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SAT-LB304
Introduction:
Atypical teratoid/rhabdoid tumor(ATRT) is an aggressive tumor of the central nervous system mostly seen in the pediatric age group. It is rare for these tumors to occur in adults, especially in the sellar region. Here we describe a case of ATRT of sellar region with rapidly progressive confusion and panhypopituitarism.
Case report: 58-year-old Caucasian woman presented with complaints of headache, generalized weakness, nausea and anorexia. Patient was also noted to be confused throughout her presentation and unable to provide detailed history. She also complained of blurring of vision and was noted to have visual field loss by her ophthalmologist. CT head without contrast revealed a sellar mass with suprasellar extension which is 2.5 x 2.4 x 3.5 cm with mass-effect on the base of anterior third ventricle. Blood work showed an A.M cortisol of 0.2 mcg/dL(6.2-19.4), prolactin of 62.6 ng/mL(4.8-22.3), TSH of 2 mIU/L(0.27-4.20) and free T4 of 0.36 ng/dL [0.80-1.90]. Cosyntropin stimulation test showed a 30-minute cortisol of 2.8 mcg/dL and a 60-minute cortisol of 4 mcg/dL. She was also noted to have hypernatremia with serum sodium upto 151 mmol/L(136-145). She was started on levothyroxine 88 mcg, DDAVP 0.1 mg PO twice daily and stress dose steroids which was weaned down to prednisone 7.5 mg daily eventually. MRI revealed 2.1 cm sellar mass with 3.1 cm suprasellar extension and rapidly progressive increase in size over several weeks period. Patient initially underwent left frontal midline craniotomy via transcallosal approach for resection of third ventricular and supra sellar tumor. For the residual tumor removal, she also underwent endoscopic resection of ATRT of brain via extended transnasal craniotomy with extensive nasoseptal flap repair of the skull base. Pathology revealed atypical teratoid/rhabdoid tumor of sellar region, WHO grade IV. The neoplastic cells characteristically show loss of INI-1 (SMARCB1), retained BRG1 (SMARCA4), focal weak positivity for EMA, Vimentin, Neurofilament (NF), CD56 and Cytokeratin AE1/AE3 is strongly positive. There is patchy non-specific immunoreactivity to PAX5 and PAX8. Hospital course was complicated by respiratory failure, NSTEMI, encephalopathy and patient is currently receiving supportive care for the same. Patient will be receiving radiotherapy and chemotherapy for further management of ATRT.
Conclusion:This case represents a rare occurrence of ATRT and suggests the need for suspicion in case of rapidly growing pituitary mass with progressive panhypopititarism.

Bone and Mineral Metabolism

CLINICAL ASPECTS OF OSTEOPOROSIS AND VITAMIN D ACTION

The Problem of Measuring 1,25(OH)2 Vitamin D in Patients With High Levels of 25(OH) Vitamin D

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MON-LB74
Recently, the use of Vitamin D in high doses for treatment of several conditions, mainly autoimmune in nature, has been advocated with dubious results. Hypercalcemia is an important side effect of this intervention. Here we describe our findings in samples that presented 25(OH)D in excess of 150 ng/mL (375 nmol/L) and had $1,25(OH)_2D$ also measured.
Material and Methods: we used serum samples from our diagnostic routine, received for measurement of 25(OH)D and $1,25(OH)_2D$ according to medical requisition. A first group (group A) included 213 samples collected up to