and greater cumulative years on non-nucleoside reverse transcriptase inhibitors drugs (1.02 (95%CI:1.001,1.04), p<0.05). **Conclusion:** Aging-related increases in SHBG were greater in magnitude among men with HIV and were related to poorer immunologic status and antiretroviral factors. The mechanisms and consequences of these findings require further investigation.

**Thyroid**

**THYROID NEOPLASIA AND CANCER**

**Ultrasound-Guided Radiofrequency Ablation RFA of Benign Symptomatic Thyroid Nodules - Initial Colombian Experience**

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**MON-LB81**

Ultrasound-guided radiofrequency ablation (RFA) of benign symptomatic thyroid nodules, initial Colombian experience

Introduction: Radiofrequency ablation (RF) is a minimally invasive technique probed as effective and safe treatment alternative for the manage. We describe the results of efficacy and safety up to 12 months following the first thyroid nodules with ablative radiofrequency in Colombia. Objective: Evaluate the efficacy and safety of RF thyroid radiofrequency ablation for benign thyroid nodules in a protocol in our center in Bogotá Colombia, case series. Methodology: Prospective, observational and descriptive Trial Patients and procedure: From May/2017 to Nov/2019 we Treated 38 patients with 59 mainly solid nodules were treated with a Radiofrequency Ablation system with cooling 2 standard techniques (Trans-isthmic approach and moving Shunt technique). Starmed system with cool type antenna of 16 G. and 10 mm active tip (3 cases) and Cosman RF cooled with 15 cm long active tips 5 to 15 mm 18 G electro Teflon. (35 cases). Here the first 59 nodules who completed a clinical and ultrasound follow-up to 12 months. Outcomes: initial volume was 15.4 +/-28 cc (0.03 a 203 cc) After radiofrequency ablation, the volume decreased significantly, in VRR% 40%, 40%, 26% y 68% at 1,3,6 & 12 months. final volume was 4.46 cc P= 0.000*. Compressive Symptoms drop from 5.84 to 1.19, 0.17, 1.76 at 1,3 & 6 moths p <0.001, Cosmetic Symptoms from 2.02/4 to 0.73, 0.58, 0.41 at 1,3 & 6 moths p <0.01. and Quality of Life symptoms from 0 to 10 drop from 5.6 to 2.4, 1.27 & 1.53 at 1,3 & 6 moths p<0.001. Not even one serious adverse event happened. Non-serious adverse events that did happened include minimal skin ecchymosis and transitory pain during less than 3 days, average 4/10 VAS (Visual Analog Scale). None developed hypothyroidism or required hospitalization. one patient presents transitory Horner syndrome and another nodule rupture. Two patients present a transitory dysphonia. Conclusions Radiofrequency ablation performed in our institution is effective and safe for the treatment of thyroid nodules. With patient satisfaction, improve the compressive, cosmetic symptoms and quality of life and without severe complications. It is necessary to continue to enrich this experience, because reducing volume and solving compressive and cosmetic problems, is ambulatory procedure.

**Tumor Biology**

**ENDOCRINE NEOPLASIA CASE REPORTS III**

**Severe Refractory Volume Overload With Diazoxide in the Treatment of Insulinoma**

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**SAT-LB303**

**Background:** Insulinoma is the most common neuroendocrine tumor (NET), occurring in 1-4 people per million. Surgical resection remains standard of care for symptomatic control and long-term remission. Where surgery is not feasible medical therapy with diazoxide and somatostatin analogues is used as supportive management. **Case:** A 88-year-old male with background hypertension, remote myocardial infarct and chronic kidney disease (CKD) (Cr 130-150 umol/L; N 60-115) was diagnosed with insulinoma following a presentation for confusion and CBG of 0.9 mmol/L. Diagnosis was confirmed by 72 hour fast with inappropriate insulin (85 pmol/L; N<95) and elevated c-peptide (1875 pmol/L; N 325-1090) with documented hypoglycemia (2.8 mmol/L). CT abdomen localized a 1.2 cm exophytic lesion in the pancreatic tail suggestive of insulinoma. Normal morning cortisol (547 nmol/L) excluded adrenal insufficiency. Initial management included resuscitation with dextrose infusions. Due to advanced age and high cardiac risk profile, the patient was not a candidate for surgical resection of the NET. Endoscopic ultrasound (EUS) ablation was deferred at time of initial hospitalization due to stabilization of hypoglycemia with high glycemic diet. An episode of nocturnal hypoglycemia prompted initiation of diazoxide 100 mg as an outpatient. Subsequent dyspnea (NYHA IV) developed and acute on chronic kidney injury (peak Cr 416 umol/L) with evidence of anasarca secondary to diazoxide use prompted readmission to hospital. With conversion to octreotide, discontinuation of diazoxide and treatment with multiple diuretics, volume overload did not improve. The patient was deemed not a candidate for intermittent hemodialysis and the decision was made to change goals of care. The patient died of complications of volume overload from cardiorenal syndrome 21 days after the initiation of diazoxide. **Conclusion:** Volume overload has been documented as a complication of diazoxide use in both hypoglycemia and hypertension, occurring in up to 50% of cases, however mortality is not common with supportive management.1,2 Risk factors for refractory volume overload appear to include reduced ejection fraction, extremes of age and history of CKD.2 Possible mechanisms for acute decompensation in CKD include increased unbound diazoxide levels, prerenal effect from hypotension and sodium retention.1,5 This case highlights the need for close monitoring with
diazoxide use in high risk patients. Clinicians should consider echocardiogram, close monitoring of clinical volume status and renal parameters. References: 1) Goode PN. (1986). World J Surg 10: 586. 2) Komatsu Y. (2016) Endocr J. 63(3): 311. 3) Tarçin O. (2018). Endocrine Abstracts 56 EP4. 4) Pearson RM. (1977) Clinical Pharmacokinetics vol 2: 198. 5) Allen WR. (1983). Pharmacology 27: 336.

Adrenal

ADRENAL CASE REPORTS II

Adrenal Tumor Causing Unexplained Hyperhidrosis in a Young Man
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SUN-LB38
Introduction: Pheochromocytoma is a rare neuroendocrine tumor, affecting around 0.8 out of 100,000 people per year [1]. The “classic triad” of headache, diaphoresis, and tachycardia is well documented in the literature. The “classic triad” in combination with hypertension has up to 91% sensitivity and 93.5% specificity for the diagnosis of pheochromocytoma [2]. Generalized sweating is part of the “classic triad”, however there is paucity of evidence in the literature describing diaphoresis as the only presenting symptom of pheochromocytoma. Case description: A 20-year-old male presented with five year history of worsening hyperhidrosis without any other associated symptoms. Vital signs were blood pressure of 138/82 mmHg and heart rate of 60 bpm. The remainder of the physical exam was normal. Laboratory testing showed 24 hour urine norepinephrine level of 1,002 ug/24 hours (normal: 0-135 ug/24hrs), plasma normetanephrine was 2,873 pg/mL (normal: 0-145 pg/mL) and plasma norepinephrine was 2,869 pg/mL (normal: 0-874 pg/mL). CT abdomen revealed a 4.0 x 3.1 x 4.3 cm left adrenal mass. After appropriate preoperative preparation, he successfully underwent a laparoscopic left adrenalectomy with complete resolution of diaphoresis. Pathology confirmed a completely resected pheochromocytoma. Discussion: This case reflects an atypical presentation of pheochromocytoma; a disease with high cardiovascular morbidity and mortality [3, 4]. The case demonstrates that the absence of hypertension or all three symptoms of the “classic triad” does not exclude the diagnosis of pheochromocytoma and any singular symptom of catecholamine excess warrants an evaluation for pheochromocytoma. This case report helps to establish the need to better quantify individual symptoms of patients with this disease in order to better understand the entire spectrum. Providers need to be aware of atypical presentation of this disease in order to decrease poor outcomes that can result from undiagnosed pheochromocytoma. 1. Beard, C.M., Sheps, S.G., Kurland, L.T., Carney, J.A., Lie, J.T., Occurrence of Pheochromocytoma in Rochester, Minnesota 1950-1979. Mayo Clinic proceedings, 1983.2. Bravo, E.L., Pheochromocytoma: New concepts and future trends. Kidney International, 1991. 40.3. Lenders, J.W.M., Duh, Q.Y., Young, W.F, et. al, Journal of Clinical Endocrinology and Metabolism. 2014.4. Zelinka, T., Petrak, O., Turkova, H., et. al, High Incidence of Cardiovascular Complications in Pheochromocytoma. Hormone and Metabolic Research, 2012.

Reproductive Endocrinology

CLINICAL STUDIES IN FEMALE REPRODUCTION

I

Developing an Integrative Medicine Patient Care Protocol for Natural Fertility in Primary Infertile Couples: A Case Series
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SAT-LB3
Background: Although advances in the field of Assisted Reproduction have improved significantly the reproductive outcome for infertile couples, success rates nonetheless remain low. Furthermore, several infertile couples are skeptical of using experimental or even established ART treatments, resulting in the need for reproductive health professionals to discuss other models which might best benefit patients who need fertility care. Clinical case series: All patients that were referred to our clinic for primary infertility (no positive pregnancy test after at least 2 years of unprotected intercourse) and had been either offered to proceed with IVF or had already a history of at least 1 failed IVF cycle, in the course of 1 year (March 2018-February 2019) were included in this study. All patients were younger than 42 years of age, AMH less than 1 ng/mL, FSH less than 12 IU/L (folicular phase FSH normal range 2.8-9.3 IU/L) and normal ovulation was present. Couples were counseled regarding a novel integrative model of achieving spontaneous pregnancy through expectant management while modifying key parameters affecting female fertility, developed after evidence-based appraisal of all relative literature. All 14 patients were examined for insulin resistance, subclinical thyroid disease, thrombophilia, and chronic endometritis and were offered the appropriate treatment, aiming for optimal (as opposed to within normal range) figures. For chronic endometritis both spouses received a one-month long triple antibiotic treatment. All patients were given careful personalized nutritional and vitamin supplementation guidelines. Regarding the psychological component of fertility all patients underwent monthly homeopathy and/or weekly acupuncture courses. All patients were designed to be followed-up for 6 months after completion of treatment (9 months after antibiotic treatment). 3 patients dropped out before receiving full treatment (rate 21%). 2 patients did not have a positive pregnancy test. All 9 remaining patients came back with a positive pregnancy test (rate 81% of those who completed treatment) on the first month of follow-up that resulted in an uncomplicated pregnancy and delivery of healthy singleton babies. Conclusion: This is the first case series indicating that expectant management could be the answer to some cases of infertility. Poor responders are sometimes reluctant to be involved in the global trend of IVF and ART, therefore a more holistic integrative approach might balance the imbalances and increase their fecundity. However, no causal inferences should be made from this consecutive case series regarding the efficacy of the investigated treatment.