four CRF categories based on age-adjusted peak metabolic equivalents (METs) achieved: Least-Fit (4.6±1.2 METs; n=2,231); Low-Fit Fit (6.4±1.1 METs; n=2,693); Moderate-Fit (8.0±1.0 METs; n=2,432); and High-Fit (10.8±2.1 METs; n=2,395). We performed multivariable Cox Regression analyses to access the risk of CKD according to fitness. The models were adjusted for age, body mass index (BMI), traditional risk factors and medications. Results: During the median follow-up of 12.4 years, 1,118 patients developed CKD, accounting for 9.1 events/1,000 person-years of observation. The association between CRF and CKD was inverse and graded. The risk of CKD was 21% lower (Hazard Ratio [HR] 0.79; 95% confidence interval [CI] 0.77-0.81). When CRF categories were considered, the CKD risk was 44% lower for Moderate-Fit patients (HR 0.56; 95% CI 0.48-0.67) and 80% lower for High-Fit (HR 0.20; 95% CI 0.15-0.25). Similar findings were noted in patients with both T2DM and HTN. Conclusions: We noted an inverse and dose-response association between CRF and CKD incidence. The risk was attenuated significantly beyond a mean peak MET level of 8.0±1.0, suggesting that moderate increases in exercise capacity confers favorable health benefits in patients at high risk of developing CKD.

**Neuroendocrinology and Pituitary**

### PITUITARY TUMORS II

**Radiofrequency Ablation as a Primary Therapy for Benign Functioning Insulinoma**

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**MON-LB59**

Radiofrequency Ablation as a primary therapy for Benign Functioning Insulinoma

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**Background**

Insulinomas are rare life-threatening pancreatic neuroendocrine tumors. Surgical removal continues to be the treatment of choice for such benign cases with a high cure rate. However, surgery is associated with a considerable risk of morbidity and mortality. Here we describe a case of benign solitary insulinoma successfully treated with RFA in a patient who strongly refused surgery. **Case Description** A 56-year-old non-diabetic male is known to have hypertension and lymphoma diagnosed at age of 20 years, in remission. He presented with recurrent episodes of transient ischemic attack and stroke over the last three years. A change in his cognitive function, behavior, and memory was noticed. During his hospital stay for the second episode of stroke, he was found to have hypoglycemia which was asymptomatic. Insulinoma was confirmed based on the followings: low plasma glucose level of 2.04 mmol/l (4.0-5.6), inappropriately elevated plasma f insulin and C-peptide 68.9 mU/l (3-13) and 4.08 ug/l (1.0-3.1); respectively. Sulfonylurea screening test was negative. MRI of the abdomen showed a 3.2x2.5 cm, well-circumscribed hypervascular lesion at the uncinate process of the pancreas, which is compatible with neuroendocrine tumor. Treatment modalities have been explained to the patient who was fully informed about the risk and benefit of each treatment option. However, he strongly refused surgery. Meanwhile, he was admitted with a third attack of stroke with concurrent hypoglycemia. In view of his refusal of the surgical treatment and due to his recent stroke and high-risk status for surgery, the option of radiofrequency ablation was decided. RFA of the pancreatic tumor using 40.75 GY fractions was carried out with a favorable outcome. The patient achieved biochemical normalization and remains euglycemic during his follow up. Reversal of his cognitive, behavioral, and memory changes was recognized.

CT abdomen during a follow-up of 2 months after radiation showed a mild regression of the size of the tumor with no evidence of new lesions or distance metastasis. He remained under close follow up at the neuroendocrine clinic.

**Conclusion** This case shows a treatment challenge which required the use of an alternative treatment option other than the standard of care in managing a case of benign insulinoma. Successful treatment was achieved in our case with the use of RFA rather than surgery. This report highlights the evolving evidence of nonsurgical RFA being a potential safe, feasible therapeutic modality option or even an alternative to surgery in selected cases of benign insulinoma. Because of the rarity of this tumor and low rate of therapeutic application of RFA in similar cases, the role of RFA had not been extensively studied. **Future studies are needed to evaluate the long-term outcomes of RFA in this setting.**

**Adipose Tissue, Appetite, and Obesity**

**OBESITY TREATMENT: GUT HORMONES, DRUG THERAPY, BARIATRIC SURGERY AND DIET**

**Resident Obesity Management: Comfort Correlates With Action**

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The projected prevalence of obesity in the US is 50% by 2030.1 Little data exists on resident physician obesity management in their primary care clinics.2 We aimed to explore internal medicine (IM) resident comfort, knowledge, and treatment practice of obesity in primary care. IM residents at one academic medical center (N=125), at 5 primary care sites were anonymously surveyed about knowledge, comfort, and practice behaviors around obesity management. In this exploratory analysis, respondents self-reported comfort with lifestyle counselling and weight management medication (WMM) prescription on 4-point Likert scales; scores were combined into an overall Comfort Score (CS). Correlation analysis (Pearson’s correlation) compared CS with the following Clinical Actions: referral to lifestyle specialists, lifestyle counseling, WMM prescription, and bariatric surgery referral. The response rate was 70/125 (56%). Most residents (91%) reported discomfort with prescribing WMMs and most (84%) had never prescribed one. While most residents (81%) were “comfortable” or “somewhat comfortable” with lifestyle counseling, only 33% reported consistently...