

Hospital in Lima Perú. Ulcers with clinical signs of infection (erythema, edema, pain, purulent exudate) according Infectious Diseases Society of America clinical practice guideline were included<sup>1</sup>. Wounds with only skin involvement were excluded. On admission, specimens for culture were obtained after cleansing and debriding of the wound. Samples were promptly sent to the microbiology laboratory for culture using appropriate transport media. Bacterial identification and antibiotic susceptibility testing were performed using the VITEK® 2 automated system (BioMérieux Laboratory, Argentina). Multidrug-resistant organisms were identified according to the recommendations of International Expert Proposal<sup>2</sup>. Prevalence ratios derived from bivariate analysis are given with their 95% CI, which was performed to study factors associated with the presence of multidrug-resistant bacteria; and a multivariate analysis with a lineal model to associated variables found in the bivariate analysis. This study has the approval of the Research Ethics Committee of the María Auxiliadora Hospital.

**Results** Among 153 selected subjects, 75% were male, with an average age of 59 yo, 70% had  $\geq 10$  years of diabetes duration and only 16% had HbA1C  $< 7\%$ . A frequency of 85% of patients with MDRO infection was found and was associated with minor amputation RP 1.18 (95% CI 1.01-1.44) and with hospitalization time of  $\geq 28$  days RP 1.21 (95% CI 1.03-1.30).

**Conclusion.** 6 of 7 patients have MDRO infection among patients with diabetic foot ulcers and are associated with the occurrence of minor amputation and hospitalization time  $\geq 28$  days.

#### References

1. Lipsky BA, *et al.* 2012 Infectious Diseases Society of America clinical practice guideline for the diagnosis and treatment of diabetic foot infections. *Clin Infect Dis.* 2012;54(12):e132-73.
2. Magiorakos AP, *et al.* Multidrug-resistant, extensively drug-resistant and pandrug-resistant bacteria: an international expert proposal for interim standard definitions for acquired resistance. *Clin Microbiol Infect.* 2012;18(3):268-81.

## Neuroendocrinology and Pituitary

### CASE REPORTS IN SECRETORY PITUITARY PATHOLOGIES, THEIR TREATMENTS AND OUTCOMES

#### *An Asynchronous Double Growth Hormone Secreting Pituitary Adenoma as a Cause of Rapid Tumor Regrowth After Initially Successful Surgery*

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#### SAT-265

**Background.** Double pituitary adenomas are a rare entity, which requires clinical attention and a careful follow-up.

**Case report.** A 37-year-old man presented with left-sided painful gynecomastia. He denied typical symptoms of excessive growth hormone (GH) secretion and did not show any acromegalic features. Due to low testosterone and LH levels with mild hyperprolactinaemia, the patient was referred to pituitary MR, which revealed an 11x13 mm right-sided sellar tumor. An increased IGF-1 was noted subsequently (1482 ng/mL; N 109-284 ng/mL), together with the lack of GH suppression in OGTT. Transphenoidal resection of pituitary tumor performed in 2012 led to biochemical (IGF-1 260 ng/mL, GH 0.08 ng/mL) and radiological remission of the disease. A histopathology report revealed a densely granulated somatotrophic pituitary adenoma with mild nuclear atypia, expressing somatostatin receptors [sstr2A (+),sstr5 (+/-)]. Due to gradually increasing IGF-1 levels (with low, although rising, GH values ranging from 0.07 to 0.92 ng/mL) in subsequent years, OGTT was repeated in 2015, showing appropriate GH suppression. In 2016, however, acromegaly recurrence was confirmed both biochemically (increasingly high IGF-1 - 664 ng/mL - and unsuppressed post-OGTT growth hormone) and in MR imaging. The patient was reoperated in June 2017. The second histopathology reported an oncocytic somatotrophic acidophil stem cell pituitary adenoma with Ki-67  $> 3\%$  and mitotic figures. Subsequent anterior pituitary lobe insufficiency (adrenal, thyroid and gonadal axis) was found and adequately treated. Complete tumor removal was confirmed by MR performed three months after repeated surgery, as well as a low GH level (0.97 ng/mL), although accompanied by borderline IGF-1 values (277 ng/mL). Eighteen months after surgery, the recurrence of acromegaly was again confirmed, with adenoma regrowth and increased GH (2.31 ng/mL) and IGF-1 (474 ng/mL) levels. Octreotide LAR was started (despite retina wrinkling which was observed when lanreotide was administered before the first surgery), which led to a normalization of GH (0.96 ng/mL) and IGF-1 levels (152 ng/mL), as well as partial pituitary tumor regression after six months therapy. **Conclusion.** In a case of GH-secreting pituitary adenoma recurrence after apparent successful surgery, a double pituitary tumor with more aggressive histology should be considered.

## Diabetes Mellitus and Glucose Metabolism

### CLINICAL AND TRANSLATIONAL GLUCOSE METABOLISM AND DIABETES

#### *Quality of Life in a Pragmatic Trial of a Type 1 Diabetes Adolescent Transition Program*

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#### MON-631

**Introduction:** Adolescents with type 1 diabetes (T1D) experience ongoing deterioration in their glycemic control as they transition to young adulthood.<sup>1</sup> Several trials have evaluated possible transition interventions to ameliorate the care gap between pediatric and adult services in

T1D care, although it remains unclear which are the most appropriate.<sup>2,3</sup> In this pragmatic study, we sought to determine whether the change in quality of life pre- and post-transition was different between adolescents with T1D accessing a transition program versus those who did not.

**Methods:** Between 2016-2018, we recruited 68 adolescents with T1D at their last pediatric diabetes clinic visit from a tertiary diabetes center without a structured transition program (control group) and 33 from a community-based outreach clinic with a transition program (intervention group) consisting of a transition coordinator, joint transition clinics, and pediatric and adult clinics located in the same building. At the time of transition and at one-year post-transition, we conducted chart reviews and administered surveys, including the SF-8 quality of life questionnaire. Analysis included descriptive statistics and linear regression models.

**Results:** The control and intervention groups had the following characteristics, respectively: age at transition 18.4 years vs. 20.5 years ( $p < 0.001$ ); female 47% vs. 55% ( $p = 0.49$ ); average A1C at the time of transition 8.2% vs. 9.1% ( $p = 0.0053$ ). There was no statistically significant difference in the change in SF-8 scores for each of the eight domains (general health, physical functioning, role physical, bodily pain, vitality, social functioning, mental health, and role emotional) between the two groups. However, older age at transition was associated with an improvement in SF-8 vitality domain scores between the pre- and post-transition timepoints ( $p = 0.034$ ). Female sex was associated with a worsening in SF-8 vitality domain ( $p = 0.004$ ) and social functioning domain ( $p = 0.015$ ) scores between the pre- and post-transition timepoints. Finally, higher average A1C in the year prior to transition was associated with a worsening in SF-8 role physical domain scores between the pre- and post-transition timepoints ( $p = 0.002$ ).

**Conclusions:** Quality of life scores in the vitality domain improved in the first year post-transition amongst young adults with T1D who transitioned at an older age, suggesting that a later transition may benefit adolescents with T1D. Additionally, worsening quality of life scores amongst young women and in those with higher pre-transition A1Cs suggest that these populations may require more specialized care at the time of transition.

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2. White et al. *Lancet Child Adolesc Health.* 2017;1(4):274-83.

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## Adrenal

### ADRENAL - TUMORS

#### *Diagnostic Performance of 18F-fluorodeoxyglucose Positron Emission Tomography in Indeterminate Adrenal Tumors*

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### SAT-157

Evidence on the diagnostic performance of 18F-fluorodeoxyglucose(18FDG) positron emission tomography(PET)/CT imaging of adrenal lesions is limited. We aimed to assess the diagnostic performance of this diagnostic modality in a high risk population for adrenal malignancy using an optimal reference standard. We included 21 patients operated in our clinic during 2019 for whom 8FDG PET was performed before adrenalectomy. 3 patients with pheochromocytoma were later excluded from statistical analysis, they were sent to PET before increased urine metanephrines were received. Unenhanced abdominal CT was performed in all the patients; median size was 4,5 (2.3-10) cm and median radiodensity was 32 (-7 to 43) Hounsfield units (HU). All patients with adrenocortical carcinoma and metastasis to adrenals from other organs had radiodensity of >10 HU. Maximum standardized uptake (SUV max) was higher in malignant lesions when compared to benign lesions (median = 10,9 [5.4-29.6] vs 4.1 [2.6-7.22], respectively,  $P = .003$ ). Similarly, median SUV max lesion to SUV max liver ratio (ALR) in malignant lesions was higher than in benign lesions (median = 2,18 [1.41-5.53] vs. 1.29 [0.67-2.13], respectively,  $P = .017$ ). 18FDG- PET/CT SUV max lesion > 6.7 diagnosed malignancy with a sensitivity of 83,3%, specificity of 91,7%.

**Conclusion:** Noncontrast CT radiodensity of  $\leq 10$  HU excludes malignancy even in a high risk population. For indeterminate adrenal lesions, given a superior specificity, 18FDG PET/CT could be considered as a second stage imaging.

## Tumor Biology

### TUMOR BIOLOGY: DIAGNOSTICS, THERAPIES, ENDOCRINE NEOPLASIAS, AND HORMONE DEPENDENT TUMORS

#### *KLF5 Is a Poor Prognostic Marker and Therapeutic Target for Middle Eastern Papillary Thyroid Carcinoma*

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### SUN-132

#### *KLF5 Is A Poor Prognostic Marker And Therapeutic Target For Middle Eastern Papillary Thyroid Carcinoma*

Thyroid cancer is the second most common malignancy among females in Saudi Arabia, with Papillary thyroid carcinoma (PTC) accounting for 80-90%. The Kruppel-like factor 5 (Klf5) is a transcription factor that play a critical role in cell transformation, proliferation and oncogenesis. Immunohistochemical analysis of KLF5 was performed in 1219 PTC cases. KLF5 over-expression was noted in 65.1% (793/1219) of PTCs, and was significantly associated with tall-cell variant ( $p < 0.0001$ ), extrathyroidal extension ( $p = 0.0003$ ), lymph node metastasis ( $p < 0.0001$ ) and stage IV tumors ( $p < 0.0001$ ). Significant association was also noted with HIF-1 $\alpha$  over-expression ( $p = 0.0492$ ).