follicles. AMH and AFC were negatively associated with age (r: -0.302, p< 0.01; r: -0.267 p<0.01, respectively). AMH showed a positive correlation with AFC (r=0.567,p<0.01). We then divided the study population in two subgroups, according to age: Group 1, women <40 years old(n=28) and Group 2, women ≥40 years old (n=21).Considering AMH= 1ng/ml and AFC = 7, the cut-off value used routinely in our institution, we calculated the Kappa coefficient in each group to test the degree of agreement between these two variables, with the following results: Group 1, Kappa= 0.4510, CI 95% [0.1566 – 0.7453], p= 0.0088; Group 2, Kappa= -0.0370, CI 95% [-0.4371 – 0.3630], p=ns.
CONCLUSION: despite the positive correlation found between AMH levels and AFC in the whole group, Kappa values show that in women younger than 40 years serum AMH>1 ng/ml is a good predictor of AFC >7, but this agreement is lost in women above this age, with the cut-off values used in this study. These results must be confirmed with a larger group of women.

Bone and Mineral Metabolism
BONE DISEASE FROM BENCH TO BEDSIDE

Use of Anti-FGF23 Monoclonal Antibody in the Treatment of Children and Adolescents with X-Linked Hypophosphatemic Rickets.

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SUN-345
Background: X-linked hypophosphataemia is the most common heritable form of rickets in children, disorder caused by mutations in PHEX, leading to elevated secretion of FGF23, renal phosphate wasting with consequent hypophosphataemia, diminish synthesis of 1,25(OH)2 vitamin D, rickets/osteomalacia, and disproportionate short stature. Conventional treatment with oral phosphate supplementation and active vitamin D heals rickets, prevents progressive growth failure, but in a substantial proportion of patients treatment is unsuccessful and/or associated with adverse effects. Since 2018, burosumab, a human monoclonal antibody against FGF23, was approved for the treatment of X-linked hypophosphataemia.**Aim**: We report a pilot experience on the efficacy and safety of treatment with burosumab in children and adolescents with X-linked hypophosphataemia (XLH). **Methods and patients**: Eight XLH patients (5 males) (5 pre pubertal and 3 Tanner IV) with an age range from 2.9 to 16.2 years, were recruited, 6/8 had family history of XLH, the remaining two were confirmed with molecular study. All discontinue conventional therapy at least 7 days before treatment with Burosumab which was administered every 2 weeks SC for 6 months, at a starting dose of 0.8 mg/kg/dose. Growth velocity, Thacher Rickets Severity Score, fasting serum calcium (mg/dl), phosphorus (P)(mg/dl), alkaline phosphatase (ALP)(IU/L), PTH (pg/dl), 25OH Vitamin D (ng/ml) and tubular phosphate reabsorption (TPR) (X±SD) were evaluated at basal, 3, and 6 months of treatment. **Results**: All patients had normal 25OH2 Vitamin D: 35.3±8.6 ng/ml at the start of therapy and had significantly improvement of serum P: basal 2.2±0.51, 3 months: 3.24±0.43 and at 6 months 3.01±0.38 mg/dl (p<0.005). The mean serum ALP level decreased from 686.9±410.8 to 535.8±302.4 and 402.5±106.7 IU/L (p<0.05) respectively. TPR normalized during treatment: 67.3±9, 86±3.1, and 86.9±6.1 %(p<0.001). The severity of rickets, as well, showed a significant improvement: 4.0±2.0, 2.3±1.2, and 1.0±0.8 (p<0.005), respectively. The non-pubertal children increased their growth velocity from 3.7±1.2 cm/yr to 7.0±1.4, and 7.9±2.0 cm/yr (p<0.05) respectively. Serum calcium and PTH levels did not show any significantly variation. Mild adverse events such as local reactions and headaches were observed. **Conclusions:** 1) Treatment with burosumab restores phosphate metabolism, 2) Growth and the Thacher Rickets Severity Score improved during treatment, 3) all patients showed a good safety profile with only minor adverse events. This is the first report of children with XLH treated with burosumab in Latin-America.

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

The Role of [68]Gallium DOTATATE PET/CT Versus ^{18}F-FDOPA PET/CT in the Imaging of Neuroendocrine Neoplasms in Patients with Multiple Endocrine Neoplasia Type 1 (MEN1)

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SUN-116
Background: Neuroendocrine neoplasms (NEN) are a heterogenous group of tumors. Patients with the multiple endocrine neoplasia type 1 (MEN1) syndrome often manifest with simultaneous functional and non-functional NEN in various endocrine glands. In MEN1, nuclear medicine plays an important role in the diagnostic work-up and localization of NEN. Little is known about the comparative efficacy of ^{68}Ga-Dotatate PET/CT (DOTA) versus ^{18}F-FDOPA PET/CT (FDOPA) and both versus non-nuclear medicine imaging (CT and MRI) in the identification of primary and metastatic NEN.
Methods: This prospective MEN1 cohort study evaluated 15 germline *MEN1* mutation-positive patients. Subjects were imaged using CT, MRI, DOTA and ^{18}F-FDOPA. Radiological review with a multidisciplinary team was performed for each patient.
Results: One-hundred twenty-nine total lesions were identified using any of the four scans. DOTA sensitivity was 69% (89/129; 95% CI 61% to 76%) with a mean standardized uptake value (SUV) of 33.9 ± 30.1, FDOPA sensitivity was

18% (23/129; 95% CI 12% to 25%) with mean SUV of 12.1 ± 15.16. DOTA identified an additional 50 lesions not seen on CT (of which MRI detected 8 lesions with an average size 0.95 cm ± 0.48; 3 pancreatic, 2 duodenal, 2 liver, and 1 lymph node) and identified 55 lesions not seen on MRI (of which CT identified 13 with a mean size of 1.1 cm ± 0.45; 1 lung, 4 pancreatic, 2 duodenal, 1 liver, and 5 lymph nodes). Overall, CT detected 51.2% (66/129) of lesions (mean 0.61 cm ± 0.73; 95% CI 43% to 60%) and MRI detected 39.5% (51/129; 0.47 cm ± 0.71; 95% CI 32% to 48%), and there was no significant difference in the size of lesions detected (p=0.18). Analysis by organ NEN revealed equal sensitivity between FDOPA and DOTA for lung carcinoid, detecting 33% (4/12) of lesions, while CT detected 92% (11/12) of lesions. In the duodenum, DOTA identified 100% (11 /11) of lesions, while FDOPA had poor sensitivity (9%) in this location. Within the pancreas, DOTA has a sensitivity of 81% (31/38), while FDOPA had a sensitivity of 21% (8/38). CT localized 42% (16/38) of pancreatic lesions, of which MRI missed 6. Interestingly, DOTA missed 7 pancreatic lesions all approximately 1cm or larger, which is previously unrecognized (range 0.9 - 1.8cm). Twenty-three liver metastases were detected on anatomic imaging (CT identified 14, while MRI detected 15, with only 9 overlapping lesions). DOTA identified 60% (14/23) of lesions, of which 3 lesions were missed by CT and MRI. However, DOTA was more sensitive in the liver than FDOPA which only detected 2 lesions. FDOPA detected one lesion in the adrenal (0.9cm) that was not seen on DOTA.

Conclusion: DOTA imaging proved to be superior to FDOPA, CT and MRI overall in detecting NENs in MEN1, specifically in the duodenum. Pancreatic NEN missed by DOTA may represent higher grade tumors and may benefit from [18]FDG PET/CT imaging.

Diabetes Mellitus and Glucose Metabolism
CLINICAL AND TRANSLATIONAL GLUCOSE METABOLISM AND DIABETES

Prescription Analysis Shows High Metformin Use and Acceptance in a Diabetes Specialty Centre in Eastern India

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MON-621
Background and aims: Achieving glycemic goals is crucial in the overall management of diabetes. Selecting the right medication for the individual patient is of paramount importance in the present day's patient centric glucose control. Metformin is the first line and gold standard antihyperglycemic agent that can be offered to type 2 diabetics. Addition of a second or third agent or insulin should be considered in those whose HbA1c remains high despite the up-regulated metformin dose or those who do not tolerate metformin. We aimed to find the pattern of metformin use in type 2 diabetic subjects in a diabetes specialty centre in coastal Odisha.

Materials and methods: This observational study was conducted in a diabetes setup in coastal Odisha in June 2018. After obtaining consent from patients, authors looked into the prescriptions of all type 2 diabetic adults. Subjects who were prescribed metformin (in any dose) were enrolled in the study. Those with established nephropathy, coronary artery disease, stroke or cancers were excluded.

Results: There were 802 footfalls noted during the study period, of which 723 metformin taking participants (298 females, 41.2%) were considered for analysis (79 persons were excluded: not meeting inclusion criteria/ not willing to participate/ history of nephropathy/ CAD/ stroke). Mean age, diabetes duration, FPG, HbA1c, serum creatinine, eGFR of the study population were 51.6±10.6 years, 11.9±11.2 years, 138.7±51.7 mg/dl, 7.8±2.1%, 0.93±0.29 mg/dl and 96.5±11.1ml/min respectively. Patients were prescribed metformin in various doses, i.e., 500mg (42 patients, 5.8%), 850mg (47 patients, 6.5%), 1000mg (396 patients, 54.8%), 1500mg (13 patients, 1.8%), 1700mg (86 patients, 11.9%) and 2000mg (130 patients, 18.0%), and 2500mg (9 patients, 1.2%). Metformin was prescribed as monotherapy (n=34, 4.7%) or along with other OADs (n=589, 81.5%) or in combination with insulin (n=178, 24.6%). Retrospective analysis of the medical records and further questioning revealed that gastric intolerance was the commonest reason for withdrawal of metformin in otherwise eligible subjects.

Conclusion: Metformin was the most commonly prescribed antidiabetic drug and the daily dose of more than 85% of the metformin administered individuals was 1000mg or above.

Neuroendocrinology and Pituitary
CASE REPORTS IN CLASSICAL AND UNUSUAL CAUSES OF HYPOPITUITARISM

Pituitary Stalk Interruption Syndrome Presenting as Neonatal Hypotonia

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SAT-241
Pituitary stalk interruption syndrome (PSIS) is a rare condition that include congenital anatomic abnormalities of the pituitary gland and hypopituitarism. There is a wide variety of clinical presentation, with the age at presentation encompassing from neonatal period to adulthood and including one or more pituitary hormone deficiencies. In recent literature there is increasing recognition of PSIS presenting in the neonatal period, mostly involving hypoglycemia. Our patient is a full-term male infant who presented in the newborn period with hypotonia and hypothermia. He also had hypoglycemia, which was initially thought to be