with central cervical lymphadenectomy. Pathology results of paraspinal mass showed insular thyroid carcinoma.
Post operatively, the patient reported improvement of sensation and strength in lower extremities. Genetic testing for MEN syndrome was negative.
Discussion: Insular thyroid carcinoma, also referred to as poorly differentiated carcinoma is a rare form of thyroid cancer. Insular carcinoma was characterized by to include the following complex histologic features, "formation of solid clusters (insulae) of tumor cells containing a variable number of small follicles; variable but consistently present mitotic activity, capsular and blood vessel invasion; and frequent necrotic foci, sometimes leading to formation of peritheliomatous patterns"[1]. The cells originate from follicular epithelium and possess the potential to concentrate radioiodine[2]. Unlike anaplastic carcinoma of the thyroid, p53 and p21 staining was negative in insular carcinomas[3]. Thyroglobulin staining is generally positive[4]. Distant metastasis occurs in about 31% of patients with insular thyroid carcinoma[5]. In cases of distant metastasis, treatment with thyroidectomy and radioiodine therapy were shown to independently improve survival[5].
The Constellation of Insular thyroid cancer, hyperparathyroidism and Prolactinoma, has not been reported before.
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Reproductive Endocrinology

CLINICAL STUDIES IN FEMALE REPRODUCTION I

Incidence and Predictors of Hypertension in a Cohort of Australian Women with and Without Polycystic Ovary Syndrome

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SAT-015
Background: There is a lack of longitudinal studies exploring the relationships between polycystic ovary syndrome (PCOS) and hypertension, in population-based settings.
Objectives: To identify predictors of hypertension in women with and without PCOS and the relationship to body mass of index (BMI).
Methods: We undertook a community-based cohort analysis of the Australian Longitudinal Study (ALSWH) data conducted on 9,688 young adult women, aged 21–42 years from 2000–2015. We conducted survival analysis using the Cox Proportional Hazards Model to identify predictors and person-time analysis to calculate incidence rates of hypertension.
Results: Overall, 9,508 women were followed for 145,159 PY (person-years) and 1,556 (16.37%) women developed hypertension during the follow-up. The incidence of hypertension was significantly higher (p = 0.001) among women with PCOS (17/1000 PY) compared to women without (11/1000 PY). There were significant differences in time to hypertension development between women +/- PCOS. Hypertension was observed among women with PCOS from early adulthood and across BMI categories. The difference in the actual number of incident hypertension cases (incidence rate difference (IRD)) between women with and without PCOS, was fourfold higher (15.8 vs. 4.3 respectively) among women who were obese at baseline, compared to age-matched lean women. PCOS was independently associated with hypertension with a 36% greater risk, adjusting for BMI and other confounders.
Conclusion: Our results suggest women with PCOS as more likely to develop hypertension from early adulthood, independent of BMI and with risk exacerbated by obesity.

Neuroendocrinology and Pituitary

NEUROENDOCRINE & PITUITARY PATHOLOGIES

Flash Glucose Sensor Monitoring for Patients with Endogenous Hyperinsulinaemic Hypoglycaemia

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SUN-299
Flash Glucose Sensor Monitoring for patients with endogenous hyperinsulinaemic hypoglycaemia
Background:
Flash glucose monitoring systems (FGS) have recently been introduced and measure interstitial glucose using an amperometric electrochemical sensor assay, and are increasingly used to provide a convenient means to monitor levels on a minute-by-minute basis over two weeks in ambulatory patients with diabetes. Although continuous glucose monitoring systems have been previously used in patients with insulinoma,(1) to our knowledge, FGS use has only been described once previously in an adult patient with an insulinoma.(2) Here, we describe use of this system in 6 patients with confirmed endogenous hyperinsulinaemic hypoglycaemia, especially for the critical nocturnal period.
Methods and patients:
FGS data obtained over each 2-week monitoring was reviewed in 6 patients seen between 2018 and 2019: 5 had a biochemically proven insulinoma and 1 had Hirata's syndrome. In 4 patients, follow-up readings were obtained after adjustment of glucose-raising medication: two on octreotide, one on diazoxide and one on diazoxide and dexamethasone.
Results:
Median age was 63 years (range 37–83). In the 4 patients with more than one 2-week FGS assessment comparison between first and last readings demonstrated that the average duration of hypoglycaemia (<4mmol/L) 126, 171, 173 and 282 minutes improved to 46, 128, 30 and 0 minutes,