Endocrinology was consulted at 2 weeks of life and she was started on 25mcg of levothyroxine PO daily. Levothyroxine dose decreased at 16 month of age to 12.5mcg due to stable thyroid function tests. The patient was last seen at 30 months of age by Pediatric Endocrinology. She is still on the low dose of levothyroxine and her thyroid labs have been within normal limits for an infant. She will likely not require lifelong thyroid supplementation.

**Conclusion:** Risk of hypothyroidism among neonates must be considered seriously after large iodine exposure and monitoring for transient hypothyroidism should be performed. It is thus recommended that attempts should be made to reduce the amount of iodine used during procedures and to carefully monitor thyroid function in all neonates exposed to an excess of iodine.

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**Pediatric Endocrinology**

**PEDIATRIC ENDOCRINE CASE REPORTS I**

**Griscelli Syndrome and Late Endocrine Effects After Stem Cell Transplant**

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**SAT-078**

**BACKGROUND:** This a unique case of late-onset endocrinopathies after stem cell transplant in a girl with Griscelli syndrome. Griscelli syndrome is a rare disorder characterized by partial albinism, silver hair and immune failure with alteration in genes necessary for melanin transport, which is curative by stem cell transplant. Although late endocrinopathies are quite common in other disorders after stem cell transplant, these complications have not been reported in Griscelli syndrome.

**CLINICAL CASE:** A 7-year old female who received a stem cell transplant as a toddler and subsequently developed graft-versus-host-disease (GvHD) at 2 years of age presented for evaluation of growth failure. Patient had severe short stature along with mild hyperthyroxinemia with subsequent diagnosis of Graves' disease which was treated with methimazole. Although hypothyroidism is more commonly seen after stem cell transplant, rare cases of hyperthyroidism have been reported. Despite normal GH and IGF-1 levels, GH therapy was commenced due to persistent growth failure. She showed a robust increase in growth parameter from -6 to -2 SD below the mean. She started spontaneous puberty, however, biochemical evaluation showed hypergonadotropic hypogonadism with undetectable anti-mullerian hormone (AMH) which is consistent with low ovarian reserve most likely related to total body irradiation prior to stem cell transplant.

**CONCLUSION:** Our patient demonstrates that growth failure, thyroid disease and ovarian dysfunction can be complications of stem cell transplants in young children with Griscelli syndrome. This can be a result of the underlying disease leading to transplant, conditioning regimen prior to transplant or complications thereafter. GvHD may also be a risk factor for future autoimmune endocrine complications in this syndrome and in other syndromes treated with stem cell transplant.

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**Tumor Biology**

**ENDOCRINE NEOPLASIA CASE REPORTS I**

**Indolent Presentation of Medullary Thyroid Cancer in a Patient with MEN Type 2B Due to a Germline RET M918T Mutation**

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**SUN-921**

Background: MEN type 2B is rare and most commonly due to a germline methionine-to-threonine substitution at codon 918 (M918T) of the RET proto-oncogene. Medullary thyroid cancer (MTC) occurs in 100% of the patients affected with the mutation. This mutation is considered the highest risk and is typically associated with aggressive disease and worse overall survival. We describe a case of a late diagnosis of MEN 2B in a patient and his son, both with a relatively indolent presentation of MTC. Clinical Case: A 39-year-old man presented to an outside institution with difficult to control hypertension, headaches and anxiety and was found to have bilateral pheochromocytomas (left, 5.8 x 5.5 x 3.8 cm and right, 9 x 5.2 x 7.3 cm). Upon presentation to our institution, he was noted to have classic phenotypic features of MEN 2B with a marfanoid habitus and multiple mucosal neuromas. Genetic testing confirmed RET M918T mutation. His family history was negative for similar features in his parents and siblings. However, one of his three children, age 12, had similar phenotypic features and was found to have the same mutation. The patient subsequently underwent a successful bilateral adrenalectomy and pathology confirmed pheochromocytomas. Thyroid ultrasound showed multiple nodules with calcifications but no lateral nodal metastases. Calcitonin and carcinoembryonic antigen (CEA) levels were elevated (170 pg/mL, normal ≤10, and 180.4 ug/L, normal <3.8, respectively). He underwent a total thyroidectomy and bilateral central node...
dissection, with pathology confirming bilateral MTC (2.7 cm and 1.0 cm), metastatic in 4 of 10 positive lymph nodes (largest focus 2 mm). Whole body PET/CT post-operatively did not show metastatic disease. The patient’s son also had multiple thyroid nodules on ultrasound without lateral nodal metastases and elevated calcitonin and CEA levels (3015 pg/ml, normal ≤10, and 433 ng/mL, normal <2.5, respectively). MRI of the abdomen and pelvis was negative for pheochromocytomas. He underwent total thyroidectomy and bilateral central neck dissection, with pathology showing bilateral MTC (2.7 cm and 1.0 cm) with 0 of 14 positive lymph nodes. For both the patient and his son, calcitonin and CEA levels normalized following thyroidectomy and surveillance over a year later reveals no evidence of disease. Conclusion: Early diagnosis of MEN type 2B is important as MTC develops early in life and is the leading cause of death in these patients. When diagnosed early, prophylactic thyroidectomy in childhood is indicated and can improve long-term survival. There are salient phenotypic features associated with this disease which were unfortunately not recognized early in this patient and his son. Fortunately, their MTC presentations appear to be relatively indolent despite their late diagnoses, and they will continue to be closely monitored for recurrent disease.

Thyroid
THYROID NEOPLASIA AND CANCER
The Impact of The Association of Unnecessarily Ordered Thyroid Ultrasounds (USGs) and Unnecessarily Requested Endocrinology Consultations
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MON-529
We have previously reported that there is a strong association between unnecessarily ordered thyroid USGs and unnecessarily requested Endocrinology (Endo) consultations. Unnecessary consultations consume time and resources, delay appropriate consultations, and have even been proposed as a factor in the over-diagnosis of clinically innocuous thyroid cancers. We have examined the impact on the consumption of clinical resources. The database consisted of 201 new Endo consults, each accompanied by a pre-consult thyroid USG. The consult requests were graded as appropriately requested (APPROP), optionally requested (OPT), or unnecessarily requested (UNNEC). The USG requests were likewise graded as APPROP, OPT, or UNNEC. The USGs were also graded on their degree of contribution to the request for a consultation, specifically, as having a significant role (SIGNIF), a minor role (MIN), or little or no role (NONE).

The impact of the UNNEC consults was categorized as (a) the initial Endo consult, a resource that would not have been utilized were an UNNEC consult not submitted, and (b) resources that probably would have been utilized were the UNNEC consults not submitted but would have been managed by and costed to the referring provider instead of to the Endo provider. Such resources included follow-up Endo visits and relevant USGs and blood tests.

Of the 201 consults with associated USGs, 156 (77.6%) consults were APPROP, 23 (11.4%) were OPT, and 22 (10.9%) were UNNEC. Conversely, 157 (78.1%) of the USGs were APPROP, 11 (5.5%) were OPT, and 33 (16.4%) were UNNEC. With respect to the association of consults with their accompanying USGs, Among APPROP requested consults, 87.8% of the associated USGs were also APPROP while only 7.7% were associated with UNNEC USGs. Among UNNEC requested consults, 31.8% of the associated USGs were APPROP while 68.2% were associated with UNNEC USGs.

Regarding the resource utilization borne by an Endo clinic as a consequence of the submission of 21 UNNEC consults for the two years after the initial consultation, each UNNEC consult had consumed, on average, 5.9 (1 + 2.6 + 2.3) [initial + Yr 1 + Yr 2 follow-ups] Endo clinic visits, 0.9 (0.5 + 0.4) USGs [excludes the USG associated with initial consultation] and 4.1 (2.2 + 1.9) blood work orders and reviews. No follow-up FNAs or thyroid surgeries were performed.

Endocrine care from any source would be best served by reducing both the unnecessary utilization and the unnecessary assignment of relevant resources.

Adrenal
ADRENAL - TUMORS
Clinical Presentations and Outcomes of Adrenal Metastases Vary Based on Etiology
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SAT-154
Background: Adrenal metastases occur in 1–8% of patients with an adrenal mass. Recognizing patterns in the presentation of adrenal metastases is critical in dictating management.
Objective: To describe the presentation of patients with adrenal metastases and identify baseline characteristics predicting the etiology.
Methods: A retrospective analysis of adult patients diagnosed with adrenal metastases between 2000–2019 at a single institution tertiary center was performed. Partial cohort analysis is presented.
Results: In 327 patients (127 (39%) women, median age at diagnosis of 67 years (range 25–92), median tumor size was 2.7 cm (range 0.5–15), and 99 (30%) had bilateral tumors. While most patients (188, 57%) were found to have an adrenal mass during cancer staging, 117 (36%) were found incidentally and 22 (7%) based on symptoms. Adrenal metastases originated from the lung (118, 36%), genitourinary (GU) (100, 31%), gastrointestinal (GI) (47,