20 Case from Inpatient Endocrine Consults

Adrenal:

1) 34 y.o male presenting with new onset bloating and dyspnea and found to have a large abdominal mass. Biopsy confirmed adrenal cortical carcinoma. CT showed evidence of metastatic disease to bone and liver. He underwent palliative resection. Work-up of adrenocortical carcinoma showed a cortisol and androstenedione/ estradiol producing tumor. Started on IV hydrocortisone post-operatively.

2) 84 y.o. female presenting with progressive weight loss and biliary duct dilation. CT showed bilateral adrenal masses with elevated HFU. Initial work-up showed abnormal dexamethasone suppression test. Evaluation for incidentaloma deferred to outpatient given her acute illness and expected higher cortisol.

3) 64 y.o. female admitted for acute on chronic back pain with history of pheochromocytoma. Initial pheo dx was 6 years earlier, s/p right adrenalectomy of 8 cm mass. She did not require any post-operative medical management. She was lost to follow up and back pain was managed as back strain/ pulled muscle and treated with steroid shots. Imaging confirmed metastases to lumbar spine, sacrum and pelvis. Biopsy revealed neuroendocrine tumor. Consulted for medical management of metastatic, unresectable pheochromocytoma with doxazosin, metoprolol. Started chemotherapy.

4) 42 y.o. female presenting with 2 months duration of headaches, sweating, flushing, lightheadedness. Several ED visits revealed fluctuating SBP 110-210. Transferred to OSU. Abdominal imaging revealed 6 cm right adrenal mass. Urinary metanephrines elevated at >13000 and was diagnosed with pheochromocytoma. She underwent right sided adrenalectomy with significant improvement in her symptoms.

Calcium:

1) 47 y.o. female with metastatic osteosarcoma (small cell variant) admitted for seizures secondary to hypocalcemia. She had denosumab (14 doses over 2 years) to prevent hypercalcemia of malignancy. She had hypocalcemia despite high dose calcium replacement. Despite last dose of denosumab over 2 months, she had recurrent hypocalcemia. High bone turnover markers suggested osteosarcoma as the leading etiology.

2) 69 y.o. male with SCLC who presented with sepsis, acute respiratory failure and found to have hypercalcemia. PTH-RP was negative. He was immobile for several weeks due to acute illness and thought could be related to this. Responded to IV Zol 4mg but calcium started to rise 10 days later. Given another dose of IV Zol. Bone markers confirmed high bone turnover state. CT A/P done for abdominal pathology showed incidental finding of metastatic lesions to spine, not present on imaging done 2-3 months prior.
3) 63 y.o. female with a PMH significant for Sjogren's, bipolar disease, prior Roux-en-y gastric bypass, DMII, HTN, HLD. She presented with altered mental status and was found to have AKI and hypercalcemia. work up revealed calcitriol mediated hypercalcemia, with elevated 1,25 dihydroxy vitamin D level and ACE levels. Hypercalcemia improved with IV hydration and patient underwent EBUS for mediastinal LNs and path was significant for sarcoidosis. She was started on prednisone.

Diabetes

1) 47 y.o. male with NSCLC presenting with new onset DKA. He started immunotherapies (nivolumab, ipilimumab) and completed 5 cycles. After his 5th cycle, endorsed polyuria, polydipsia, fatigue, anorexia. Daughter with T1DM. Antibodies were negative, but HLA typing showed DR4 positivity. Dx with immunotherapy induced autoimmune diabetes mellitus.
2) 69 y.o. male presented with a fall and consulted for fragility fracture. During hospitalization, noted to have severe hypoglycemia to 30s on serum glucose. Initially was asymptomatic, initial work-up ruled out factitious insulin use, but insulin levels and c-peptide were inappropriately normal. Fragility fracture work-up revealed an IgA kappa myeloma. Started on dextrose gtt with refractory hypoglycemia, used cornstarch without much effect. Started on prednisone and responded well, tapering steroids resulted in hypoglycemia. Literature review confirmed cases of myeloma related insulin antibody secretion.
3) 48 y.o. female presented with symptoms of several weeks duration of syncopal events, sweating, lightheadedness, shakiness. Had several episodes with BG ranging in 20-50 range. No prior history of diabetes. No access to diabetic medications. Work up revealed elevated insulin levels and a 11 mm pancreatic tail mass. She underwent distal pancreatectomy and splenectomy with resolution of symptoms with path + insulinoma, as suspected.

4) 52 y.o. male presented with 2 weeks of polydipsia, polyuria, weakness, blurred vision and fatigue. Hx of metastatic renal cell carcinoma 2 years prior treated with left sided nephrectomy, nivolumab x 2 years. On arrival he was found to have new onset diabetes with BG of 564 and A1C of 7.2%. No family history of diabetes. . Antibodies were negative but HLA typing showed DR4 positivity. Diagnosed with immunotherapy induced autoimmune diabetes mellitus.

Lipids:

1. 53 y.o. male presented with abdominal pain, nausea and emesis. Found to have elevated lipase, amylase and was diagnosed with pancreatitis. Further work up revealed hypertriglyceridemia as the cause with TG levels >5000. Hypertriglyceridemia was a result of L-asparaginase he received as part of his chemotherapy for ALL. He had two more episodes of mild pancreatitis after subsequent doses of L-asparaginase as part of chemo. He was treated with plasmapheresis with each episode of pancreatitis.

Pituitary:

1) 40 y.o. male with metastatic melanoma on ipilimumab presenting with episode of confusion, unresponsiveness, poor memory. He was found to have adrenal insufficiency and pituitary panel confirmed panhypopituitarism. MRI pituitary showed hypophysitis and leading diagnosis was immunotherapy related autoimmune hypophysitis.
2) 38 y.o. male presenting with worsening neurologic changes, polyuria and polydipsia and recent diagnosis of neurosarcoidosis. He was hypernatremic and unable to keep up with water intake with 6-8 liter urine output daily. MRI pituitary showed significant neurosarcoidosis with possible pituitary stalk compression.
3) 65 y.o. female admitted from neurosurgery clinic for hypotension and AMS. She was noted to have a pituitary mass on a recent brain imaging done for CVA. Clinical symptoms of polyuria, polydipsia were consistent with DI. Further work up revealed pituitary lesion as well pituitary stalk involvement raising concern for pituitary metastasis. Given sudden onset central DI and acute decline in clinical status, further work up for malignancy was performed. She was found to have a large mediastinal mass along with right renal mass. Unusual presentation of malignancy with pituitary dysfunction as presenting symptoms. Patient passed away prior to further work up.

Thyroid:

1) 75 y.o. female diagnosed with hyperthyroidism 6 weeks prior, started PTU, cholestyramine and propranolol for possible thyroid crisis/ storm. She developed abdominal pain, fatigue, altered mentation 2 weeks prior to presentation. Transferred to OSU for acute liver failure. On presentation she had diffuse macular rash, acute liver failure and agranulocytosis. Bone marrow biopsy confirmed medication-induced agranulocytosis. PTU was discontinued, and thyroid levels were stable (possible 2/2 sick euthyroid). Prepped for charcoal dialysis if hyperthyroidism worsened in acute state as thyroidectomy would not be an option.
2) 48 y.o. male presented with several weeks duration on DOE, SOB, orthopnea, weight loss, palpitations, increased appetite. Noted to have a goiter with bruit. Elevated T4 with suppressed TSH. Noted to be in afib with RVR and cardiomyopathy with EF of 25%. He was diagnosed with cardiomyopathy and afib from thyrotoxicosis.
3) 22 y.o. female presented to OSUMC ED with 2 months duration of headache, blurred vision, galactorrhea, fatigue, mental fogginess, weight gain. Has a long standing history of hypothyroidism with non-compliance to Synthroid. TSH >150, undetectable free T4, elevated prolactin at 300. She had delayed reflexes on exam. She had significantly enlarged pituitary about 3x normal size abutting optic chiasm. Differential included prolactinoma vs pituitary hyperplasia from long standing primary hypothyroidism-induced elevated TRH and PRL. 3 months after starting levothyroxine, TFTs, prolactin, and symptoms normalized. Pituitary imaging showed complete normalization of pituitary gland, confirming our initial impression.
4) 54 y.o. female presented with AMS, hypothermia, diffuse swelling and hypotension. Hx of primary hypothyroidism and liver transplant for NASH cirrhosis. She was found to be in myxedema coma with bradycardia, hypothermia, hypotension, comatose, diffuse swelling and delayed reflexes TSH >150 and free T4 undetectable. Clinical picture was consistent with myxedema coma. Further questioning of family revealed that patient stopped taking her levothyroxine few months ago as she got confused with her other medications. She started IV levothyroxine and hydrocortisone. Cortisol level obtained prior to initiation of steroids was appropriate to her clinical situation excluding adrenal insufficiency. There was complete resolution of hypothermia, bradycardia and hypotension within 5 days of initiation of IV levothyroxine.
5) 28 y.o. female, G2P1001 at 31w6d gestation presented with premature rupture of membranes. Tachycardia,goiter with bruit, hyperreflexia noted on PE. TSH <0.008, fT4 4.58 and total T3 of 5.87. She started methimazole and monitored in hospital for 5 weeks until he reached 36 weeks and was induced. She had a successful NVD with healthy baby.