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and anti-emetics. At home, he continued to feel ill, with polydipsia and fatigue. He became confused and lethargic, and returned to the ER. He denied visual changes, seizures or head trauma. On exam, he was normotensive and ill-appearing. Labs showed Na 108, K 3.7, serum osmolality 250(osm/l), urine Na 70 and urine osmolality 235.

Further work up revealed early morning cortisol of 3.5(mg/dl), TSH 0.35(mg/l), FT4 0.9(NL), prolactin 3.2 and IGF-1 96(z-score -0.8). An ACTH stimulation test showed baseline cortisol 0.8, 30 min 10.9 and 60 min 14.7. ACTH was 3(mg/l). An interval increase in size of the RCC to 2.2cm with intrinsic T1 hyperintense foci likely representing blood products was seen on MRI brain. Visual field testing was unremarkable. He received IV hydrocortisone with gradual resolution of hyponatremia. Neurosurgery recommended conservative management as visual fields were intact and he was improving clinically. He was discharged on hydrocortisone; 20mg in the am and 10mg in the afternoon. MRI brain 3 months later showed a residual RCC measuring 8mm in size. Subsequent pituitary labs were unremarkable except an ACTH stimulation test which revealed a 60min cortisol of 16.0, with baseline ACTH of 17. He is currently on hydrocortisone 15mg daily, without hyponatremia.

Discussion: Hypo-osmolar, euvoletic hyponatremia in this setting occurs mainly from loss of cortisol feedback inhibition on ADH release from the posterior pituitary, resulting in free water retention, and corrects with hydrocortisone replacement. In the absence of visual deficits, RCC hemorrhage can be managed conservatively with appropriate hormone replacement and serial brain MRI. Central Al may be transient as reported in some cases, but can also persist for more than 6 months, as seen in our patient.

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Abstract #1000905

Pituitary Apoplexy Presenting in a COVID-19 Positive Patient as Ophthalmoplegia

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Introduction: Pituitary apoplexy (PA) involves infarction or hemorrhage of a pituitary adenoma with symptoms including headache, nausea, decreased visual acuity, temporal visual field deficit, ophthalmoplegia, and altered mental status. We present a 38-year-old female with acute headache and ophthalmoplegia who was found to have COVID-19 and PA.

Case Description: A 38-year-old female patient who was found to be COVID-19 positive on admission presented to the hospital with severe headache, nausea, vomiting, blury vision, and ophthalmoplegia for 4 days. She reported an unintentional 50 lb weight gain over 2 months, hot flashes, and increased frequency of menstrual cycles to 3 per month. Exam revealed right eyelid ptosis, right third and sixth cranial nerve palsies, and bilateral temporal hemianopia.

MRI brain showed a 3.6 x 2.6 x 2.4 cm mass in the pituitary fossa, right greater than left cavernous sinus extension, and mass effect on the prechiasmatic optic nerves and optic chiasm. MRI pituitary later revealed a hemorrhagic mass with extra-axial blood products. Biochemical workup revealed low FSH, LH, and estradiol - 4.500 mIU/L, and Free T4 0.84 (0.89 - 1.76 ng/dl). No clinical or biochemical signs of diabetes insipidus were noted. Patient was started on hydrocortisone prior to discharge and she completed a full course of antibiotic therapy for meningitis. A follow-up MRI approximately one month from injury showed interval resolution of intrasellar/pituitary abscess and improvement of osteomyelitis of the sella. Repeat serology approximately 6 months following original injury showed LH 2.5, FSH 2.7, Estradiol 155, Prolactin 8.1, IGF-1 243, morning cortisol 7.7, TSH 8.69 and Free T4 1.1.

Discussion: Infections of the hypothalamic pituitary region are rare and account for less than 1 percent of all pituitary lesions. Risk factors include meningitis, paranasal sinusitis, head/neck surgery, and an immunocompromised host. Most events have been reported in case reports or small case series. Symptoms and deficiencies can range from isolated pituitary hormones to panhypopituitarism. Some reports have possibly seen more of an effect on anterior pituitary hormones, though, some have reported diabetes insipidus. In the majority of reported cases, endocrine dysfunction has been irreversible and, should recovery occur, one needs to monitor for inflammation, bleeding and infraction as recurrence is possible. In our patient, endocrine dysfunction improved with treatment of infectious etiology. Repeat MRI will be done to document stability.

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Methods:

Presenting in a tertiary setting.

Symptoms and laboratory parameters of the male IHH patients showing hypogonadism are present. The condition not only affects sexual characteristics but MRI is more sensitive for PA. Treatment includes conservative management with steroids if there are no neurologic deficits to surgical resection for more symptomatic tumors and hormone replacement therapy.

Discussion:

Pituitary apoplexy is a rare condition that develops when a pituitary tumor spontaneously hemorrhages or outgrows its blood supply. Symptoms include headache due to meningeal irritation, vision changes, and ocular motor palsies due to mass effect. Hormonal disturbances due to pituitary stalk compression can cause sexual problems, menstrual disturbances, galactorrhea, and fatigue. CT scan can detect a mass and rule out other hemorrhage, but MRI is more sensitive for PA. Treatment includes conservative management with steroids if there are no neurologic deficits to surgical resection for more symptomatic tumors and hormone replacement therapy.

Our patient presented with acute onset of neurological deficits and symptoms of hormone disturbances. CT scan revealed a pituitary mass, but MRI was needed to visualize hemorrhage. Clinicians should order appropriate imaging so pituitary apoplexy can be addressed in a timely manner.

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Abstract #1001394

A Rare Endocrine Complication of the COVID-19 Vaccine

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Introduction:

Pituitary adenomas are a common, asymptomatic finding in the general population. They are usually diagnosed incidentally on imaging studies. Rarely, pituitary adenomas can progress to pituitary apoplexy, defined as hemorrhage and/or infarction and are often associated with a triggering event.

Case Description:

A 44-year-old man with a history of hypogonadism presented to the hospital for fevers, chills, and blurry vision that started after he received his second COVID-19 vaccine three days prior. The day following his vaccine, he initially developed subjective fevers, chills, and myalgia which he self-treated with over the counter analgesics at home. Three days after the vaccine, he developed blurry vision along with change in mental status which brought him to the hospital. When he initially presented to an outside hospital, vital signs showed hypotension with a temperature 105.9 degrees Fahrenheit but other laboratory findings on imaging studies, there was concern for adrenal insufficiency and the patient was started on stress dose steroids. He was transferred to a tertiary care center and vitals at the time were significant for a temperature 105.9 degrees Fahrenheit but otherwise hemodynamically stable. He underwent an endoscopic transsphenoidal resection of the pituitary tumor given compression of the optic chiasm. Pathology report was consistent with pituitary adenoma with focal hemorrhage and necrosis of pituitary adenoma cells. Patient currently remains on maintenance dose steroids and levothyroxine.

Discussion:

Pituitary apoplexy can occur either spontaneously or due to a stressful trigger. There have been no case reports showing the novel COVID-19 vaccine leading to pituitary infarction or hemorrhage. Although the pathophysiology is not entirely clear, our patient may have developed a robust immune response that