SUN 453

Rare Case of Large Adrenal Mass

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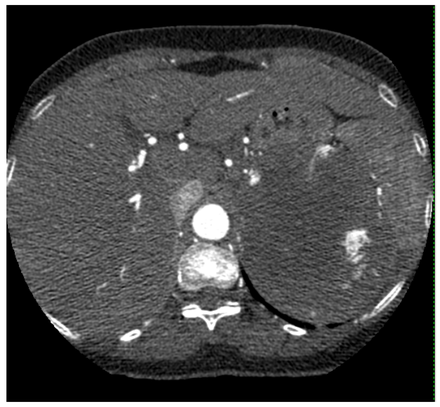
Background

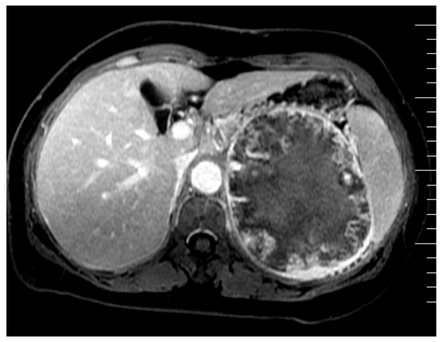
Giant hemangiomas of the adrenal gland are very rare. We present a case of giant adrenal hemangioma presenting as adrenal incidentaloma.

Clinical Case

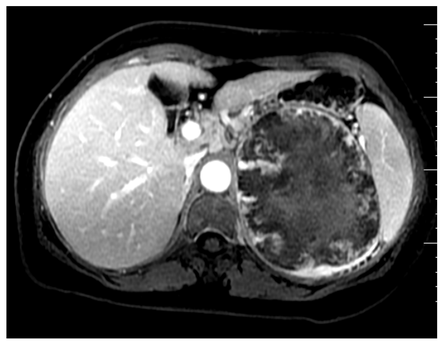
A 63-year-old female presented to ER with left lower chest pain radiating to her back. Review of symptoms was positive for shortness of breath. Her past medical history was significant for well-controlled hypertension and Hepatitis C. Medications included lisinopril. Vitals were stable with PR of 68/minute and BP of 138/90. On exam, she did not appear Cushingoid. Physical exam was normal. CT scan of chest and upper abdomen revealed 10.5 cm vascular mass in the left upper quadrant and the origin of mass was difficult to determine. MRI of abdomen revealed large 12.3 cm necrotic left adrenal mass with heterogeneous peripheral enhancement, no signal drop out on out of phase and no evidence of macroscopic fat. Labs revealed normal CBC and BMP. Hormonal work up showed plasma free metanephrine of 47 pg/mL (<205), 8 AM cortisol of 20.4 µg/dL (8.7-22.4), ACTH – 33 pg/mL (6-50), androstenedione of 84 ng/dL (35-250), total testosterone of 52 ng/dL (2-45), free testosterone of 1.7 ng/dL (0.2-5), DHEA S of 28 ng/dL (102-1185). 24-hour urine studies showed normetanephrine of 220 mcg/g (<900), metanephrine of 54 mcg/g (<400), dopamine of 245 mcg/g (700-900), catecholamine of 26 mcg/g (<205) and free cortisol of 140.5 µg/dL (<50). The left adrenal mass was removed intact by laparotomy and the surgical pathology showed hemangioma.



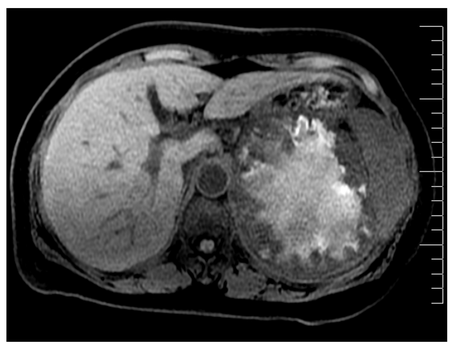
CT of abdomen without contrast showing Left adrenal mass



MRI abdomen – T1 weighted images, pre contrast



MRI T1 weighted images, post contrast delayed



MRI T1 weighted images, post contrast late

Conclusion

Differential diagnosis of adrenal incidentaloma is broad and includes adenoma (80%), adrenal cortical carcinoma (5%), metastatic cancer from an extra-adrenal primary (2%), pheochromocytoma (5%), and benign lesions like adrenal cyst, myelolipoma, hematoma, ganglioneuroma or cavernous hemangioma. Only 58 cases of adrenal hemangiomas have been reported so far in literature[1]. They are thought to be congenital and to arise from the endothelial cells lining blood vessels. They contain areas on hemorrhage, necrosis, degeneration and calcification. They tend to be unilateral, heterogeneous, hypodense lesions with a high-density rim of tissue at the periphery of the lesion on enhanced CT[2,3]. Like adrenal cortical carcinoma they tend to have delayed washout of contrast on CT scan[4]. However none of the pre operative imaging features are diagnostic and surgical pathology provides definitive diagnosis.

References

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No potential conflict of interest to disclose