Management of Functioning and Nonfunctioning Tumors of the Adrenal Gland

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HOSPITAL PHYSICIAN

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I. INTRODUCTION

This review describes the various imaging modalities available to aid in diagnosing and localizing adrenal masses; it is the second half of a 2-part review on tumors of the adrenal gland. Indications for operation and selection of an appropriate operative approach are also discussed. Sample board review questions and answers are included for self-assessment at the end of this review. The initial evaluation of the patient with an adrenal mass, presented in the first half of this review (“Diagnosis of Functioning and Nonfunctioning Tumors of the Adrenal Gland” in the Hospital Physician General Surgery Board Review Manual, Volume 7, Part 2), describes confirming the diagnosis and determining the functional status of the lesion using biochemical and nuclear medicine studies.

II. CASE PATIENT 1

PRESENTATION

Patient 1 is a 61-year-old man who presents with a 7 to 10 day history of continuous right-sided abdominal pain radiating to his back. He denies any associated symptoms, such as nausea, vomiting, change in bowel habits, hematuria, headache, palpitations, or diaphoresis. His medical history is pertinent for resection of the upper lobe of his left lung (10 months before this presentation) because of a Mycobacterium avium–intracellulare complex infection that was resistant to antibiotic treatment. Within the excised specimen, a poorly differentiated bronchogenic carcinoma was incidentally found. Nine peribronchial and mediastinal lymph nodes were resected, but not one was involved with tumor. Patient 1 also has a history of chronic obstructive pulmonary disease, benign prostatic hypertrophy, and a 50 pack-year smoking history. His family medical history is unremarkable. A review of systems is pertinent only for a 5-lb. weight loss during the past month, which he attributes to a reduced appetite secondary to his abdominal pain.

DIAGNOSTIC TESTING

Physical examination reveals a blood pressure of 145/66 mm Hg, heart rate of 75 bpm, and temperature of 36.8°C. He has no obvious features consistent with Cushing’s syndrome (CS). He has no palpable adenopathy. His abdomen is soft and nontender with no palpable masses or organomegaly. He has a healed left thoracotomy scar.

A computed tomograph of the abdomen reveals a large, rounded, well-defined, hypodense right adrenal mass that measures 7.5 × 9.4 × 9.6 cm (Figure 1). The