

HOSPITAL PHYSICIAN®

ONCOLOGY BOARD REVIEW MANUAL

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The *Hospital Physician Oncology Board Review Manual* is a study guide for fellows and practicing physicians preparing for board examinations in oncology. Each manual reviews a topic essential to the current practice of oncology.

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Management of Resectable Gastric Cancer

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Management of Resectable Gastric Cancer

Kimie Ng, MD, Jeffrey Meyerhardt, MD, MPH,
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INTRODUCTION

In 2007, there will be an estimated 21,260 new cases of gastric cancer in the United States and 11,210 deaths.¹ Although the incidence of gastric cancer has declined worldwide over the last few decades, gastric cancer remains the fifth most common malignancy and the second leading cause of cancer mortality.²⁻⁴ Curative surgery is the mainstay of treatment; however, only 50% of patients are resectable at presentation, and cancer recurrence following surgery remains common.⁵ Consequently, considerable efforts have been invested to improve systemic therapies and develop effective adjuvant and neoadjuvant treatment approaches to supplement curative surgery. The goal of this case-based review is to familiarize clinicians with the diagnostic approach and treatment options for patients who have resectable gastric cancer. The management of nonresectable gastric cancer is beyond the scope of this review.

CLINICAL EVALUATION

CASE

Initial Presentation

A 58-year-old Chinese man presents to his primary care physician with progressive left upper quadrant pain, which he describes as a constant dull ache. He reports a sensation of early satiety but denies dysphagia and odynophagia. The patient first presented to his primary care physician 4 months ago with these symptoms. At that time, he was prescribed omeprazole for dyspepsia. However, his symptoms have persisted, and he now returns for re-evaluation. He has lost approximately 20 lb over the past 4 months.

The patient has a history of non-insulin-dependent diabetes mellitus; he has peripheral neuropathy but no other complications. He also has hyperlipidemia and fatty infiltration of the liver. His medications include metformin, simvastatin, and omeprazole. The patient has no known drug allergies. Family history is notable

for a maternal grandfather who died of liver cancer in his sixties. The patient currently smokes a half pack of cigarettes a day and has done so for the past 20 years. He denies significant alcohol intake and has never used illicit drugs. The patient immigrated to the United States from China approximately 20 years ago. On review of systems, the patient reports fatigue but denies fever, night sweats, nausea, vomiting, and diarrhea.

Physical Examination and Laboratory Findings

On physical examination, the patient appears thin but otherwise well, with an Eastern Cooperative Oncology Group performance status of 1. His temperature is 97.7°F, heart rate is 96 bpm, respiratory rate is 20 breaths/min, and blood pressure is 120/60 mm Hg. Head and neck examination reveal no abnormalities, including no palpable lymphadenopathy in the cervical and supraclavicular chains bilaterally. Lung examination is clear to auscultation bilaterally, and cardiac examination demonstrates a regular rate and rhythm without any murmurs. The patient's abdomen is soft, nontender, nondistended, and without hepatosplenomegaly. His lower extremities do not show evidence of cyanosis, clubbing, or edema. Neurologic examination is grossly nonfocal except for mild decreased sensation to light touch in his toes bilaterally. His skin examination is unremarkable.

A complete blood count shows a white blood cell count of 10,400/ μ L, hemoglobin level of 9.0 g/dL, hematocrit of 29.9%, and platelet count of 263,000/ μ L. A complete metabolic panel and liver function tests are normal.

- **What are the risk factors for developing gastric cancer?**

Gastric cancer is more common in men than women, and its distribution differs geographically, with the highest rates seen in Eastern Asia, specific areas in South America, and Eastern Europe. The age of onset tends to be younger in these regions than in Western countries.⁶ Migration studies demonstrate that a change in risk occurs as immigrants move from higher to lower risk areas, implying that early environmental exposures are influential in the development of gastric