Renal Cell Carcinoma—Serendipitous Scanning

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A 46-year-old male nonsmoker applying for life insurance has the following history. He was seen for complaints of chronic left sided low back pain in December 2001. A CT scan showed degenerative changes in the lumbar spine and an incidental 5.8 × 6.1 cm complex, enhancing right upper pole renal mass with perinephric stranding evident. The patient had no symptoms or physical findings referable to this mass. He underwent right radical nephrectomy January 2002 (2 years prior to application) for a low grade, stage 2, clear cell type, renal cell carcinoma. He has had negative follow-up exams, CT scans and CXRs. He has no family history of cancer.

Renal cell carcinomas account for about 2% of all cancers. Smoking, obesity, hypertension, exposure to heavy metals and Von Hippel-Lindau disease are among the predisposing factors for these tumors. They are twice as common in men as in women, are increasing in incidence, and have shown a small but significant increase in 5-year survival.

These tumors are characterized by their lack of early warning signs. The classic triad of presenting signs and symptoms—hematuria, abdominal pain, and a palpable abdominal or flank mass—occurs in less than 10% of cases. Prior to the common use of CT...
scanning and ultrasonography, less than 10% of renal cell carcinomas were detected as incidental findings. Since the widespread use of these radiologic techniques, 25% to 40% of renal cell carcinomas are now discovered as incidental findings, and these are generally found as smaller tumors and at an earlier stage, providing a greater potential for resection and cure. This is felt to be the main reason for the observed increase in both incidence (see figure) and survival.

Tumor stage is the most critical factor in survival. In a review article on this subject, stage I and II tumors had 5-year survival rates of 65%-85% and 45%-80%, respectively; stage III and IV tumor survival rates were much lower.

REFERENCE