Prostatitis is a fairly common disorder that is easily diagnosed clinically. If an abscess of the prostate is suspected, ultrasound or computerized tomography (CT) would be equally effective documenting the presence of a prostatic mass although differentiation from other causes of enlargement would be difficult.

The introduction of transrectal sonographic probes for the evaluation of prostatic enlargement has resulted in increased efficiency in differentiating benign from malignant prostatic disease. In addition, local extent of malignancy, such as bladder invasion (Fig. 5-1) or pelvic lymphadenopathy, can be detected. Rectal involvement is more difficult to detect because of the presence of artifact producing gas within the rectum. Distal ureteral obstruction secondary to prostatic disease can also be evaluated sonographically.

In patients with documented prostatic malignancy, CT at this time is the procedure of choice for local staging of tumor prior to therapy and following treatment. Invasion of adjacent organs or spread to pelvic or abdominal lymph nodes can be easily detected (Fig. 5-2). CT is also well suited for postoperative evaluation and planning of radiotherapy. The seminal vesicles are very clearly defined utilizing high-

J. Bisker, *Clinical Applications of Medical Imaging*  
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resolution scans and can also be evaluated regarding the possible spread of bladder or prostate malignancy. It is believed, however, that magnetic resonance imaging will eventually replace CT in the staging of pelvic malignancy.

**SCROTUM**

The common pathologic processes affecting the scrotum include inflammatory changes secondary to torsion or infection, scrotal masses, neoplasm, trauma, and scrotal hernias. Prior to the advent of newer imaging procedures, the clinical presentation and physical findings were the primary means of diagnosis except in the cases of scrotal hernia, which occasionally could be detected by the presence of bowel gas in the scrotal sac seen on plain radiographs of the pelvis.