

# HOSPITAL PHYSICIAN®

## UROLOGY BOARD REVIEW MANUAL

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## Curative Treatment Options for Localized Prostate Cancer

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#### INTRODUCTION

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In 2001, 98,100 male patients will be diagnosed with adenocarcinoma of the prostate gland, making it the most common cancer identified in men.<sup>1</sup> Increased public awareness and support of prostate-specific antigen (PSA) testing have not only resulted in larger numbers of men being diagnosed with prostate cancer, but have also led to a shift in presenting stage.<sup>2-6</sup> A greater percentage of men are now being identified with curable disease. Several treatment options are available to these patients, each with potential advantages, disadvantages, and reported cancer control rates. Individual patient concerns regarding erectile and voiding function often guide treatment decisions as much as the desire for cancer cure.

The primary categories of treatment with curative intent are surgical removal of the prostate gland (radical prostatectomy) and primary radiotherapy. Surgical extirpation can be performed via a retropubic, perineal, or laparoscopic approach. In some patients, one or both neurovascular bundles may be spared, allowing preservation of sexual function. Radiotherapy may be administered via an externally delivered beam or by brachytherapy, which entails direct implantation of radioactive seeds into the substance of the prostate. Combined radiotherapy using both external beam and brachytherapy is also an option for patients. Investigative modalities such

as cryotherapy and thermotherapy have not shown enough consistency in results to be considered an agreed upon treatment approach as of the preparation of this manuscript.<sup>7,8</sup>

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#### RADICAL PROSTATECTOMY

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##### CASE PRESENTATION

###### Initial Presentation

A 49-year-old man presents to a urologist for a second opinion regarding his newly diagnosed prostate cancer, after his local urologist told him that he is not a candidate for nerve-sparing surgery.

###### History

As part of his most recent annual physical examination, the patient had a PSA level performed for the first time because of his concern over the recent diagnosis of metastatic prostate cancer in his 55-year-old brother. The patient's father also was diagnosed with localized prostate cancer at age 52 and had his prostate gland removed. His father subsequently died from a stroke at age 70. (The status of his father's prostate cancer at the time of his death is unknown.)

At the time of the patient's annual physical examination, his PSA level was 4.5 ng/mL. A repeat value obtained 2 weeks later was 4.3 ng/mL, with a free PSA