A 62-year-old man with a history of benign prostatic hyperplasia presented to the urology clinic with a chief complaint of hematuria. The patient had last been seen 2 years prior but was poorly compliant, failing to attend subsequent follow-up appointments. Physical exam was remarkable for an enlarged and indurated prostate. Laboratory tests revealed a markedly elevated prostate specific antigen of 275 ng/mL. A computerized tomography scan confirmed the presence of a tumor in the prostate, one that had invaded the right seminal vesicle. A bone scan showed metastatic disease. A biopsy confirmed adenocarcinoma, Gleason score $3 + 4 = 7$. Urethrocystoscopy, however, additionally revealed a polypoid, partially cystic lesion within the prostatic urethra at the verumontanum. The lesion was subsequently resected and submitted in 2 pieces, totaling 8 mm in greatest dimension. Histopathologic findings demonstrated a papillary, exophytic lesion with prostatic-type epithelium and glandular structures containing concretions (Figures 1 and 2). Cellular atypia and mitotic activity were not identified.

**What is your diagnosis?**
Pathologic Diagnosis: Prostatic-Type Polyp of Verumontanum

The prostatic-type polyp of verumontanum is an uncommon, benign papillary lesion of the prostatic urethra. One of the earliest descriptions of this entity in the literature was provided by Randall in 1913. Since then, there have been numerous case reports and series documenting the existence of this polyp, which can affect men in a wide age range. Clinically, 2 presentations predominate: hematospermia and hematuria, although dysuria and increased frequency of micturation have also been reported. Grossly, the lesion is typically a solitary, small polypoid or sessile mass in the prostatic urethra or verumontanum. Lesions have also been documented in the bladder trigone region and anterior urethra, as well as the penile urethra. The polyp typically ranges in size from 1 to 6 mm, although the polyp in our case was slightly larger, measuring 8 mm. Microscopically, the polyp is composed of papillary fibrovascular cores lined by both transitional and columnar epithelium. The vascular character of the lesion accounts for the bleeding with either urination or ejaculation. The transitional epithelium tends to be confined to the base of the lesion. The columnar epithelium invaginates and forms prostatic-type glands that often contain corpora amylacea. The prostatic origin of the polyp may be confirmed by immunohistochemical stains for prostate specific antigen, and in this case, prostate specific antigen immunostains were positive.

The pathogenesis of this benign lesion has yet to be clarified. The theories range from acquired causes, such as reactive metaplasia secondary to previous trauma, to defects in the embryogenesis of the prostate gland. To date, there is no published literature to provide an unequivocal answer. When discovered, the lesion is treated with simple resection and fulguration, but it recurs in a minority of cases. In their series of 131 cases, Mi et al reported a recurrence rate of 1.5% after treatment. Malignant transformation has been reported but is distinctly uncommon.

References