

PAE Is a Promising BPH Treatment Alternative

The procedure may be particularly efficacious for men with very large prostates

BY REGGIE WILSON, MS

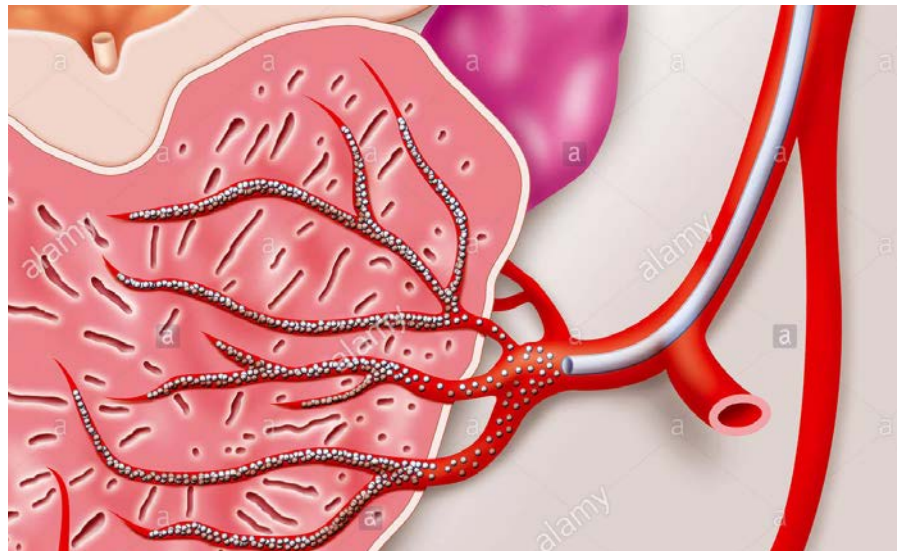
AMELIA ISLAND, FL—Prostate artery embolization (PAE) has been emerging as a minimally invasive alternative for patients suffering from benign prostatic hyperplasia (BPH). Via femoral or radial artery access, an interventional radiologist deploys microspheres endovascularly to block the arterial supply to the prostate using a small diameter micro catheter. With blood supply curbed, the prostate shrinks, relieving the symptoms of BPH such as slow or weak urinary stream, urgency and frequent urination.

Shivank Bhatia, MD, Associate Professor of Interventional Radiology and Urology at the University of Miami Miller School of Medicine, who has been at the forefront of the implementation of this procedure in United States, spoke about his 3 years of experience with PAE during a presentation at the Florida Urological Society (FUS) annual meeting. All the patients treated by Dr. Bhatia are assessed in a multidisciplinary fashion with urologists, interventional and diagnostic radiologists, and primary care physicians. This multidisciplinary approach helps providers to offer all the possible treatment alternatives, including PAE when appropriate, and helps patients to make an informed decision regarding their condition, he said. “With BPH affecting so many men, having another option that is minimally invasive is a real benefit to patients,” Dr. Bhatia said.

Dr. Bhatia highlighted how PAE has been able to alleviate symptoms and improve the quality of life of his patients. For example, an 80-year old patient had presented with refractory urinary retention for three months.



Shivank Bhatia, MD



Prostate artery embolization involves the use of microspheres to block arterioles.

The patient’s MRI revealed a prostate volume of 571 mL, and he had declined open prostatectomy. PAE was performed and the patient was able to urinate freely within 10 days of the procedure. At 3 months follow-up, the patient’s prostate volume dropped to 270 mL, his BPH symptoms were mild, and his quality of life score had improved from “terrible” to “pleased.”

Although this patient was unique in having such a large prostate, Dr. Bhatia said many of the patients he has treated with PAE have similar favorable outcomes. Since first performing PAEs in 2014, Dr. Bhatia has treated patients with a variety of prostate-related issues ranging from lower urinary tract symptoms and urinary retention to gross hematuria and as a pre-operative measure to reduce blood loss during radical prostatectomy for prostate cancer. The majority of the patients treated with PAE can go home few hours after the procedure and report significant improvement in urinary function within a month of the procedure.

“PAE offers a non-invasive alternative to treatment of BPH in men who are refractory to medical therapy,” said Sanoj Punnen, MD, attending urologist at the University of Miami and the FUS program co-chair. “For many men who may find the surgical options to be less appealing, this technology provides them with a safe and effective alternative to standard therapies.”

Program co-chair Christopher S. Gomez, MD, a BPH specialist, works closely with Dr. Bhatia to offer a mul-

tidisciplinary approach to patients suffering with BPH. “PAE has emerged as a minimally invasive treatment option for men that I routinely discuss when counseling them regarding surgical alternatives to TURP,” Dr. Gomez said.

When compared with surgical options like TURP, PAE has a vastly diminished risk of long-term side effects, such as retrograde ejaculation, incontinence, or sexual dysfunction, Dr. Bhatia explained. Post-procedural adverse effects of PAE most commonly include urethral burning and urinary frequency. Within 2 weeks of the procedure, however, these effects usually resolve.

PAE seems to have a role in a select cohort of patients, Dr. Bhatia pointed out. Specifically, PAE could be an option for elderly patients who have an increased risk of morbidity with conventional surgery. PAE may be most beneficial in patients with larger prostates. Dr. Bhatia said he plans to continue performing PAEs and examine its long-term efficacy. Randomized controlled studies comparing PAE versus TURP are still in progress.

“These studies will enable us to introduce an alternative treatment option for the patients with an enlarged symptomatic prostate,” Dr. Bhatia said. “PAE needs to be studied in more detail before it can be adopted as an approved mainstream alternative for management of BPH; however, initial results are very encouraging. This treatment alternative might have niche applications in patients with very enlarged glands.” n

Phosphorus Information Often Wrong

CURRENT consumer and research-related nutritional databases cannot be relied upon to list accurate amounts of phosphorus in beverages and likely foods, according to the latest product review in the *Journal of Renal Nutrition* (2016;26:e27-e30).

Recent studies have reported inaccuracies in databases, so Caitlin Krekel, MSPH, RD, and colleagues examined them. For 46 drinks, they compared actual phosphorus measurements from Medallion Laboratories in Minneapolis with listed amounts in databases and calorie-counting sites. Beverages included popular colas, fruit-flavored drinks, coffee drinks, iced teas, lemonades, vitamin-containing waters, and sports drinks, all available at grocery stores.

The researchers found just 28 of the 46 beverages in the Nutrient Data System for Research (NDSR). Of these, listed phosphorus amounts were lower than measured amounts for 78%. Similarly, the USDA Standard Nutrient Reference Database yielded exact matches for just 5 beverages and some-

Listed phosphorus amounts in beverages may be lower than measured amounts.

times underestimated phosphorus content. The Web sites MyFitnessPal and CalorieKing provided no phosphorus information for any of the beverages.

Manufacturers supplied phosphorus amounts for 14 of the beverages that were remarkably similar to measured amounts. When products provided no such information, the investigators calculated phosphorus content based on cation values listed on the nutrition facts labels. These calculations approached actual phosphorus amounts, but they were time-consuming to produce.

Increasing awareness among food manufacturers about the importance of dietary phosphorus restriction in patients with kidney disease may help encourage self reporting of phosphorus content and consequently improve the quality of dietary phosphorus content information available to both researchers and consumers,” Krekel and colleagues concluded. n

Illustration of prostatic artery embolization, a technique for treating benign prostatic hypertrophy (adenoma of the prostate). While a urinary probe is inserted through the urethra in order to visualize the center of the prostate, a catheter is introduced through the right femoral artery, up into the common iliac artery, then down the left side via the left, internal iliac artery, the left, internal pudendal artery to reach the prostatic arteries. Microbeads are injected into the prostatic arterioles to the center of the prostate in order to block the arterioles. The size of the prostate slowly decreases.