

Management of Dysuria for BPH Surgical Procedures

Ricardo Gonzalez, M.D. Medical Director of Voiding Dysfunction at Houston Metro Urology, Houston, Texas

Dysuria following Benign Prostatic Hyperplasia (BPH) Procedures

Transient dysuria following surgical treatment of benign prostatic hyperplasia (BPH) is not an uncommon occurrence regardless of treatment. Many factors may contribute to dysuria after these procedures, including irritation from the introduction of the cystoscope; the degree of tissue necrosis; the surgical modality utilized; the surgical technique employed; and the patient's condition. This paper will focus on both pre-procedural as well as post-procedural management of irritative symptoms related to surgical BPH procedures.

Contributors to Dysuria

Ricardo Gonzalez, M.D., Medical Director of Voiding Dysfunction at Houston Metro Urology states, "Inefficient surgical technique can encourage coagulative necrosis, which may increase inflammation. This is more likely to be the case at the beginning of the surgeon's learning curve with the procedure. Other possible sources include, if the channel created after the surgical procedure is not smooth or symmetric. It may lead to: a more turbulent flow, or longer time to epithelialize, or more nerve fiber exposure in the prostate, leading to heightened tissue sensitivity."

Procedural Measures to Mitigate Dysuria for GreenLight[™] Procedures

Dr. Gonzalez points out, "Efficient vaporization has been shown to provide good clinical results. The key is proper heating of the prostatic tissue: The temperature must be over 100 degrees Celsius to achieve efficient vaporization. In addition, it is wise to use a systematic

approach, concentrating on one area without 'jumping around'. Keep the laser at .5 mm away from the tissue when using the GreenLight PV® system; and 3 mm or less for the GreenLight HPS® and GreenLight XPS® systems. Care must also be taken at the bladder neck: Identify the UOs and trigone, use lower power (60-80 watts) and avoid directing energy into the bladder."

Pre-and Post-Operative Management of Dysuria

Dr. Ricardo Gonzalez is an expert in the treatment of BPH with the GreenLight Laser System. "I spend considerable time educating patients on what to expect after surgical treatment of BPH, including dysuria," says Dr. Gonzalez. "Proper patient education will prevent many unnecessary phone calls from patients."

Dr. Gonzalez recommends showing patients a cystoscopic view of the prostate, explaining the healing process and the timeline for what to expect following the procedure.

"I explain that most patients will experience some degree of burning after the procedure, but it should be gone by the third day. Most patients should be free from dysuria within one week post-procedure." Dr. Gonzalez says he will issue a Medrol® (methylprednisolone) dose pack if the patient complains of symptoms after one week if a culture is negative at the time and there are no contraindications. His pre-operative and post-operative medical treatment for dysuria has led to extremely low incidence of dysuria rates among his patients.

Management of Dysuria for BPH Surgical Procedures

Options

Dr. Ricardo Gonzalez uses the following pre- and post-operative treatment to mitigate dysuria for GreenLight procedures:

Patient Education

- Spend time educating patients on what to expect after treatment
- Show cystoscopic view of prostate
- Explain healing process and timeline

Medical Management

All patients receive the following medical therapy for GreenLight procedures:

Pre-Op

- Appropriate IV or PO antibiotic
- Decadron (dexamethasone) 10 mg IV (optional)
- Both on call to OR

Post-Op

- Pyridium™ (phenazopyridine) 200 mg Sig 1 PO tid prn burning Disp #21
- Cipro (ciprofloxacin) 500 mg PO bid x 5 days
- Colace™ (docusate) 100 mg Sig 2 PO qPM Disp #5
- Meloxicam 15 mg Sig 1 PO daily prn pain Disp #30
- Equivalents OK

Medrol is a registered trademark of the Upjohn Corporation, Kalamazoo, Michigan. Colace is a trademark of Mead Johnson & Company Corporation, Evansville, Indiana. Pyridium is a trademark of Pyridium Corporation, Nepera Park, New York.

The GreenLight™ laser system is intended for incision/excision, vaporization, ablation, hemostasis and coagulation of soft tissue, including photoselective vaporization of the prostate for benign prostatic hyperplasia (BPH). The laser system is contraindicated for patients who: are contraindicated for surgery, contraindicated where appropriate anesthesia is contraindicated by patient history, have calcified tissue, require hemostasis in >2 mm vessels, have uncontrolled bleeding disorders, have prostate cancer, have acute urinary tract infection (UTI) or severe urethral stricture. Possible risks and complications include, but are not limited to, irritative symptoms (dysuria, urgency, frequency), retrograde ejaculation, urinary incontinence, erectile dysfunction, hematuria - gross, UTI, bladder neck contracture/outlet obstruct, urinary retention, perforation - prostate, urethral stricture.

Prior to using these devices, please review the Operator's Manual and any accompanying instructions for use for a complete listing of indications, contraindications, warnings, precautions and potential adverse events.

