

Glossary

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Procedure Glossary

CAT scan: (CT Scan- Computerized axial tomography) creates a three-dimensional image of the body from x-rays that have been taken from several different angles. It creates cross-sectional images of several structures in the body and is used to detect abnormalities such as: infections, tumors, cysts, blood clots and fractures.

Digital Cystoscopy: Visual examination of the bladder and urinary tract

IVP/KUB: (X-ray of the bladder, kidneys and urinary tract)- intravenous pyelogram: X-ray of kidney, urinary tract and bladder using dye (injected into arm). Do not eat or drink 3 hours prior to appointment, unless diabetic or hypoglycemic. (KUB- X-Ray without dye)

Prostate biopsy: Use of ultrasound for picture, to take biopsy of prostate tissue

Prostate ultrasound: Use of ultrasonic sound waves for picture of prostate

Rigi scans: Device that measures and records nocturnal erections

Urodynamics: Bladder function studies

Vasectomy and no-scalpel vasectomy: ?Surgical cutting of the tube which transports sperm. Used for sterility.

BCG treatment for cancers: Treatment to help prevent recurrent bladder tumors (have one per week for six weeks. Must go for cytology 4 weeks after last treatment, and cystoscopy 6 weeks after last treatment

Bladder scan: Used by the physician to measure urinary bladder volume

Blood tests: PSA and free PSA: Prostate Specific Antigen Blood test which checks for prostate abnormalities (normal range 0-4.0)

BUN/creatinine: BUN- Blood urea nitrogen- measures kidney function. Creatinine- Chemical found in the blood and urine- Excessive amounts indicate kidney disease.

Catheter changes: Changing of rubber or plastic tube that is inserted in the bladder in order to withdraw urine

Self-catheter teaching: Guidance of Nurse Practitioner re: catheter

Hormone injections: For the treatment of impotence

Independent medical exams: Independent Medical Exam (IME) performed by a UA practitioner for a pending medical malpractice case

Indigo laser treatment: Used to eliminate excess tissue

Kegel exercises: Strengthens the muscles of the pelvic floor, which leads to more control and prevents leakage.

Lupron/Zolodex injections: Drug therapy for prostate cancer (must be done between 28 and 33 days)

Quality of life with nurse practitioner: ? Counseling patient on voiding dysfunction and urinary incontinence. [See Nurse Practitioner page for more info.](#)

Stone analysis: Determines composition and make up of a calculus; a solid mineral concretion (i.e. kidney stone)

Urinalysis: Analysis of urine for blood and bacteria, etc.

Urine culture: Check for growth of bacteria and for which drugs they are sensitive to

Urine cytology: Urine test that tests for abnormal cells

24-hour urine: Done in conjunction with blood test for risk assessment profile for stones

Uroflow rates: Measurement of urinary stream (need full bladder for test)

General Urology Glossary

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absorbent products: Pads and garments, disposable or reusable, worn to absorb leaked urine. Absorbent products include shields, undergarment pads, combination pad-pant systems, diaperlike garments, and bed pads.

anemia: A condition in which the blood is deficient in red blood cells, in hemoglobin, or in total volume.

anxiety: A debilitating condition of fear, which interferes with normal life functions.

artificial urinary sphincter (AUS): Sometimes complicated cases of incontinence require implantation of a device known as an artificial urinary sphincter. People who might benefit from this treatment include those who are incontinent after surgery for prostate cancer or stress incontinence, trauma victims and people with congenital defects in the urinary system. The artificial sphincter has three components, including a pump, balloon reservoir, and a cuff that encircles the urethra and prevents urine from leaking out. The cuff is connected to the pump, which is surgically implanted in the scrotum (in men) or labia (in women). The pump can be activated (usually by squeezing or pressing a button) to deflate the cuff and permit the bladder to empty. After a brief interval, the cuff refills itself and the urethra is again closed. Because the artificial sphincter is an implant, it is subject to the risks common to implants, such as infection, erosion (breaking down of tissue) and mechanical malfunction. Yet with appropriate pre-surgical evaluation, operative techniques and postoperative follow-up, many problems can be avoided and incontinent patients can experience an improved quality of life with this device.

assisted reproductive technologies (ART) : The new forms of fertility treatment incorporate many methods of sperm retrieval and preparation. Once the sperm have been processed to ensure optimal fertilizing potential, they are used in a variety of procedures that

aid the process of conception. These procedures include artificial insemination (AI), in vitro fertilization (IVF), and sperm microinjection techniques.

autologous: Derived from the same individual.

behavioral techniques: Different methods to help "retrain" the bladder and get rid of the urgency to urinate. (see biofeedback, bladder training, electrical stimulation, habit training, pelvic muscle exercises, prompted voiding).

benign prostatic hyperplasia: A condition in which the prostate becomes enlarged as part of the aging process.

benign tumor: A tumor that is not cancerous

bilateral: A term describing a condition that affects both sides of the body or two paired organs, such as kidneys.

biofeedback: A procedure that uses electrodes to help people gain awareness and control of their pelvic muscles.

bladder: A hollow muscular balloon shaped organ that stores urine until it is excreted from the body.

bladder training: A behavioral technique that teaches the patient to resist or inhibit the urge to urinate, and to urinate according to a schedule rather than urinating at the urge.

brachytherapy: Involves the placement of tiny radioactive pellets into the Prostate gland. By utilizing ultrasound to place the seed pellets, damage to surrounding tissues is minimized. Approximately 13,500-16,000 rads of radiation energy is delivered directly to the Prostate. This procedure is performed on an outpatient basis. It is a one time procedure with very effective results. The 10-year follow-up outcome data parallels that of Radical Prostatectomy.

catheter: A tube passed through the body for draining fluids or injecting them into body cavities. It may be made of elastic, elastic web, rubber, glass, metal, or plastic.

catheterization: Insertion of a slender tube through the urethra or through the anterior abdominal wall into the bladder, urinary reservoir, or urinary conduit to allow urine drainage.

chancere: A hard, syphilitic primary ulcer, the first sign of syphilis, appearing approx. 2 to 3 weeks after infection. The ulcer begins as a painless lesion or papule that ulcerates. Occurs generally singly, but sometimes may be multiple.

chemolysis : Certain types of kidney stones can be dissolved with the application chemicals. Uric acid stones, for example, can be dissolved with a solution of sodium bicarbonate in saline. Cystine stones may be treated successfully with a combination of acetylcysteine and sodium bicarbonate in saline. Struvite and carbon apatite stones can be treated with an acidic solution of hemiacidrin. The procedure involves infusing the chemical solution into the affected area by means of a ureteral catheter in a series of treatments over time until the stone is dissolved. The patient's urine must be cultured regularly throughout the course of treatment to guard against urinary infection and prevent the buildup of excessive chemical levels, particularly magnesium, which can cause other health problems.

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colon: The large intestine.

corpora cavernosa: Two chambers in the penis which run the length of the organ and are filled with spongy tissue. Blood flows in and fills the open spaces in the spongy tissue to create an erection.

creatinine: A waste product that is filtered from the blood by the kidneys and expelled in urine.

cryotherapy: During an operation probes are placed in the prostate. The probes are then frozen which kills the prostatic cells.

cystocele: A herniation of bladder into vagina

cyst: A lump filled with either fluid or soft material, occurring in any organ or tissue; may occur for a number of reasons but is usually harmless unless its presence disrupts organ or tissue function.

cystectomy: Surgical removal of the bladder.

cystoscopy: A flexible scope is inserted into the urethra and then into the bladder to determine abnormalities in the bladder and lower urinary tract.

detrusor-external sphincter dyssynergia (DESD): Damage to the nervous system can create a lack of coordination between the bladder and the external sphincter muscle, which is the muscle that controls the emptying of the bladder. As a result the bladder cannot empty completely which creates a buildup of urinary pressure. DESD is a combination of these two factors and can lead to severe urinary tract damage and life-threatening consequences.

diabetes mellitus: A common form of diabetes in which the body cannot properly store or use glucose (sugar), the body's main source of energy.

diuretic: A drug that increases the amount of water in the urine, removing excess water from the body; used in treating high blood pressure and fluid retention

ejaculation: Ejection of semen during male orgasm.

ejaculation, retrograde: The discharge of semen into the bladder rather than through the urethra and out of the body.

electrohydraulic lithotripsy (EHL) : This technique uses a special probe to break up small stones with shock waves generated by electricity. Through a flexible ureteroscope, the physician positions the tip of the probe 1 mm from the stone. Then, by means of a foot switch, the physician projects electrically generated hydraulic shock waves through an irrigating fluid at the stone until it is broken into small fragments. These can be passed by the patient or removed through the previously described extraction methods. EHL has some limitations: It requires general anesthesia, and is generally not used in close proximity to the kidney itself, as the shock waves can cause tissue damage. Fragments produced by the hydraulic shock also tend to scatter widely, making retrieval or extraction more difficult.

enterocele: Herniation of small bowel into vagina

estrogen: Hormones responsible for the development of female sex characteristics; produced by the ovary.

external beam radiation therapy: A 25-28 treatment protocol that utilizes External Beam Radiation. Approximately 6800-7400 rads of radiation energy is delivered to the Prostate. There can be some radiation effect on surrounding tissues.

extracorporeal shock wave lithotripsy (ESWL): Extracorporeal shock wave lithotripsy uses highly focused impulses projected from outside the body to pulverize kidney stones.

habit training: A behavioral technique that calls for scheduled toileting at regular intervals on a planned basis. Unlike bladder training, there is no systematic effort to motivate the patient to delay voiding and resist urge.

hormonal therapy: Involves the use of anti-androgens. An androgen is a male hormone needed for the production of testosterone. By depriving the cancer cells of the testosterone they need for growth, tumors regress in size and cellular activity. Side effects include gynecomastia, the enlargement of breast tissue, hot flashes, and loss of libido (desire to have sex). Some long term hormonal therapy is associated with the loss of muscle mass, osteoporosis, and malaise (loss of energy).

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hydrocele: A painless swelling of the scrotum, caused by a collection of fluid around the testicle; commonly occurs in middle-aged men.

hypermobility: A condition characterized in which the pelvic floor muscles can no longer provide the necessary support to the urethra and bladder neck. As a result, the bladder neck drops when any downward pressure is applied and causing involuntary leakage. This condition is the most common cause of stress urinary incontinence.

hyperplasia: Excessive growth of normal cells of an organ.

insemination: The placement of semen into a woman's uterus, cervix, or vagina.

InterStim continence control therapy: A therapy used in treating urinary retention and symptoms of overactive bladder, including urinary urge incontinence and urgency-frequency. Therapy uses a small implanted device to send mild electrical pulses through a thin wire to the sacral nerve, which controls the bladder and surrounding muscles. Click [here](#) to see a picture.

interstitial laser: A laser probe is placed within prostatic tissue. Laser energy is then used to destroy prostatic tissue which makes urination easier.

intrinsic sphincter deficiency (ISD): Weakening of the urethra sphincter muscles. As a result of this weakening the sphincter does not function normally regardless of the position of the bladder neck or urethra. This condition is a common cause of stress urinary intinence.

irritable bladder: Involuntary contractions of muscles in the bladder, which can cause lack of control of urination.

kegel exercises: Exercises is to strengthen the muscles of the pelvic floor, which leads to more control and prevents leakage.

kidney: One of a pair of organs located at the back of the abdominal cavity. Kidneys make urine through blood filtration.

kidney stone: A hard mass composed of substances from the urine that form in the kidneys.

laparoscopy: Surgery using an laparoscope to visualize internal organ through a small incision. Generally less invasive than traditional surgeries requiring a shorter recovery period.

laparoscopic lymph node dissection: If a perineal prostatectomy is contemplated then prior to the operation the pelvic lymph nodes are sampled via three small incisions made in the abdomen, much like the procedure used to remove gallbladders.

lithotripsy: A procedure done to break up stones in the urinary tract using ultrasonic shock waves, so that the fragments can be easily passed from the body.

menopause: The period that marks the permanent cessation of menstrual activity, usually occurring between the ages of 40 and 58.

metastasis: The spreading of a cancerous tumor to another part of the body.

microwave (targis): A catheter is placed within the bladder and positioned within the prostate, then the antenna emits microwaves. This procedure increases the passageway allowing for easier urination.

mixed incontinence: Having both stress and urge incontinence.

nephrectomy: Removal of an entire kidney.

open nephrolithotomy: is the most invasive procedure for removing kidney stones. Because it is so traumatic, most kidneys can withstand no more than two such operations. Deep anesthesia is required, after which the surgeon makes a large (10-20 centimeter) incision in the patient's back or abdomen, depending upon where the stone is located. Either the ureter or the kidney is opened and the stone extracted. Most patients require prolonged hospitalization afterward, and recovery may take up to two months.

orchietomy: The surgical removal of one or both of the testicles.

orchitis: Inflammation of a testicle.

overactive bladder: A condition characterized by involuntary bladder muscle contractions during the bladder filling phase which the patient cannot suppress.

overflow UI: Leakage of small amounts of urine from a bladder that is always full.

percutaneous nephrolithotomy (PCN): Percutaneous means "through the skin." In PCN, the surgeon or urologist makes a 1-centimeter incision under local anesthesia in the patient's back, through which an instrument called a nephroscope is passed directly into the kidney and, if necessary, the ureter. Smaller stones may be manually extracted. Large ones may need to be broken up with ultrasonic, electrohydraulic or laser-tipped probes before they can be extracted. A tube may be inserted into the kidney for drainage.

pelvic muscle exercises: Pelvic muscle exercises are intended to improve your pelvic muscle tone and prevent leakage for sufferers of Stress Urinary Incontinence. Also called Kegel exercises. (see biofeedback)

periurethral bulking injections: A surgical procedure in which injected implants are used to "bulk up" the area around the neck of the bladder allowing it to resist increases in abdominal pressure which can push down on the bladder and cause leakage.

post-void residual (PVR) volume: A diagnostic test which measures how much urine remains in the bladder after urination. Specific measurement of PVR volume can be accomplished by catheterization, pelvic ultrasound, radiography, or radioisotope studies.

prostaglandin: Any of various oxygenated unsaturated cyclic fatty acids of animals that have a variety of hormonelike actions (as in controlling blood pressure or smooth muscle contraction).

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prostate: A muscular, walnut-sized gland that surrounds part of the urethra. It secretes seminal fluid, a milky substance that combines with sperm (produced in the testicles) to form semen.

prostatectomy: Surgical removal of the prostate.

- **suprapubic / retropubic prostatectomy:** This involves the removal of obstructing prostatic tissue through a supra-pubic incision (a cut below the belly button). The Prostate is not wholly removed. **Suprapubic Prostatectomy** requires incising the bladder to remove the obstructing tissue while a **Retropubic** approach involves incising the Prostatic capsule to remove the obstructing tissue. Both approaches utilize an abdominal incision.
- **radical retropubic prostatectomy:** Removal of prostate through an abdominal incision. The prostate is completely removed. The advantage is that the lymph nodes can be sampled at the time of the operation and the nerve-sparing procedure is easier to do via this operation.
- **perineal prostatectomy:** A Perineal incision is utilized. The advantages are: less blood loss, easier visualization of the bladder / urethral anastomosis and decreased recovery time because the incision does not involve muscle or any other vital tissue

prostatic stent: Inserted through a cystoscope, it is a wire device that expands after placement thus pushing prostate tissue away from passageway allowing for easier urination.

prostatitis: Inflammation of the prostate

prostatron: Also called TUMT or Transurethral Microwave Thermotherapy. A catheter is placed within the bladder and positioned within the prostate, then the antenna emits microwaves. This procedure increases the passageway allowing for easier urination.

pubovaginal sling: A surgical procedure in which a man-made or cadaveric piece of material is placed under the bladder neck to support and immobilize. This technique improves sphincter function and decreases bladder neck movement, improving continence.

pyelonephritis: Inflammation of the kidney, usually due to a bacterial infection.

pyuria: The presence of pus in the urine; usually an indication of kidney or urinary tract infection.

rectocele A herniation of rectum into vagina

sexually transmitted disease (STD): Infections that are most commonly spread through sexual intercourse or genital contact.

sling procedures: Surgical methods for treating urinary incontinence involving the placement of a sling, made either of tissue obtained from the person undergoing the sling procedure or a synthetic material. The sling is anchored to retropubic and/or abdominal structures.

sphincter: A ring of muscle fibers located around an opening in the body that regulates the passage of substances.

stress test: A diagnostic test that requires patients to lift something or perform an exercise to determine if there is urine loss when stress is placed on bladder muscles.

stress urinary incontinence: Urinary Incontinence: The involuntary loss of urine during period of increased abdominal pressure. Such events include laughing, sneezing, coughing or lifting heavy objects.

testosterone: The sex hormone that stimulates development of male sex characteristics and bone and muscle growth; produced by the testicles and in small amounts by the ovaries.

transient urinary incontinence: Temporary episodes of urinary incontinence that are gone when the cause of the episode is identified and treated, such as a bladder infection.

TUMT (transurethral microwave thermotherapy): See [Prostatron](#).

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TUNA (transurethral needle ablation): The instrument is placed into prostate tissue through cystoscope the tissue between the needles is destroyed via thermal energy.

TURP (transurethral resection of the prostate): A surgical telescope is used to core out the inside of the prostate (urethra) creating a larger channel making the passage of urine easier. This is the gold standard for treatment of BPH.

ultrasonic lithotripsy : Similar to ureteroscopy, ultrasonic lithotripsy uses an optical scope and electronic probe, inserted into the ureter under epidural (spinal) anesthesia, to locate the stone. High-frequency ultrasound waves then are directed at the stone to break it up gradually. The fragments can either be passed naturally by the patient or removed by grasping forceps, basket extraction or suction through the scope instrument. The instrument is not flexible, however, so ultrasonic lithotripsy typically can be employed only when a straight path directly from outside the body to the stone is possible.

underactive bladder: A condition characterized by a bladder contraction of inadequate magnitude and/or duration to effect bladder emptying in a normal timespan. This condition can be caused by drugs, fecal impaction, and neurologic conditions such as Diabetic neuropathy or low spinal cord injury or as a result of radical pelvic surgery. It also can result from a weakening of the detrusor muscle from vitamin B12 deficiency or idiopathic causes. Bladder underactivity may cause overdistension of the bladder, resulting in overflow incontinence (see overflow incontinence).

ureteroscopy: A flexible, fiberoptic instrument resembling a long, thin telescope is inserted through the urethra and bladder up to the ureter to visualize the tube. Often used for retrieval of kidney stones.

urge UI: The involuntary loss of urine associated with a sudden and strong urge to void (urgency).

urge/urgency: A strong desire to void.

urinalysis: A group of physical and chemical tests done on a sample of urine to check for various disorders, including those of the kidneys and urinary tract.

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urinary incontinence:(UI) Involuntary loss of urine sufficient to be a problem. There are several types of UI, but all are characterized by an inability to restrain voiding.

urinary tract infections (UTIs): UTIs are caused by bacteria that invade the urinary system and multiply, leading to an infection.

urodynamic tests: Diagnostic tests to examine the bladder and urethral sphincter function.

vesica sling procedure: is a surgical sling procedure used to stabilize the bladder neck and provide support for the urethra using autologous or synthetic sling material. This procedure treats both hypermobility and ISD.

varicocelectomy: The cutting away of a varicocele.

varicocele embolization: An outpatient procedure in which the varicocele is closed off (occluded) by means of a balloon catheter (flexible tube with a tiny detachable balloon), steel coil, and/or sclerosing (vessel-hardening) solution.

vasoepididymostomy A microsurgical procedure that uses a microscopic camera and very small operative tools to correct obstructions in the genital tract. The procedure requires removal of the blockage in the epididymis (the coiled tube that extends the length of each testis and connects with a larger duct - the vas deferens) and re-attachment of the epididymis to the vas deferens.

vasovasostomy: Vasovasostomy is a vasectomy reversal, the re-connection of the severed ends of the vas deferens restoring the flow of sperm through the vas deferens.

vaportrode: A type of cautery electrode that vaporizes Prostatic tissue. This creates a larger prostatic channel which makes urination easier.

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