1. Oliguria associated with acute tubular necrosis is characterized by which urinary findings:

A. ↑ sodium, ↓ urea, ↓ osmolality.
B. ↓ sodium, ↓ urea, ↓ osmolality.
C. ↓ sodium, ↑ urea, ↓ osmolality.
D. ↑ sodium, ↑ urea, ↑ osmolality.
E. ↓ sodium, ↓ urea, ↑ osmolality.

2. The most important factor responsible for the frequent recurrence of UTIs in an otherwise healthy, young woman is:

A. adhesive fimbriae of uropathogens.
B. specific receptors on urothelial cells.
C. presence of pathogenic coliforms in stool.
D. feminine hygiene practices.
E. method of contraception.

3. The antimicrobial agent that can be used at the usual dosage in an azotemic patient is:

A. nitrofurantoin.
B. sulfamethoxazole.
C. doxycycline.
D. trimethoprim.
E. fluconazole.

4. A 23-year-old woman suffers a complex pelvic fracture in an MVC. A cystogram reveals limited extraperitoneal extravasation of contrast at the bladder neck. The bladder is compressed by a pelvic hematoma and an anterior vaginal laceration is also present. No other injuries are noted, and she is hemodynamically stable. Treatment should be:

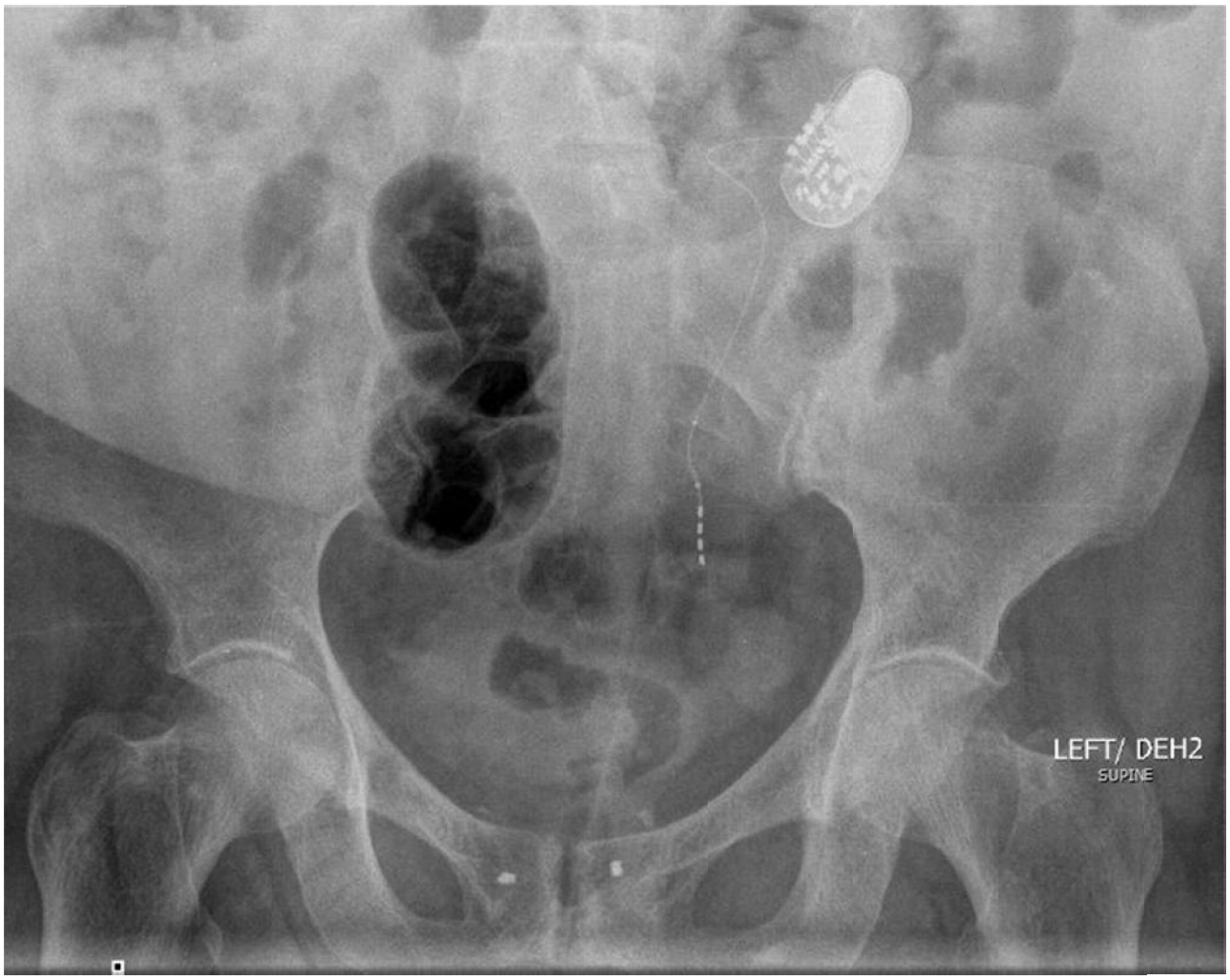
A. urethral catheter drainage.
B. suprapubic cystostomy.
C. urethral catheter placement and repair of vaginal lacerations.
D. bladder repair and vaginal packing.
E. repair of vaginal and bladder lacerations.

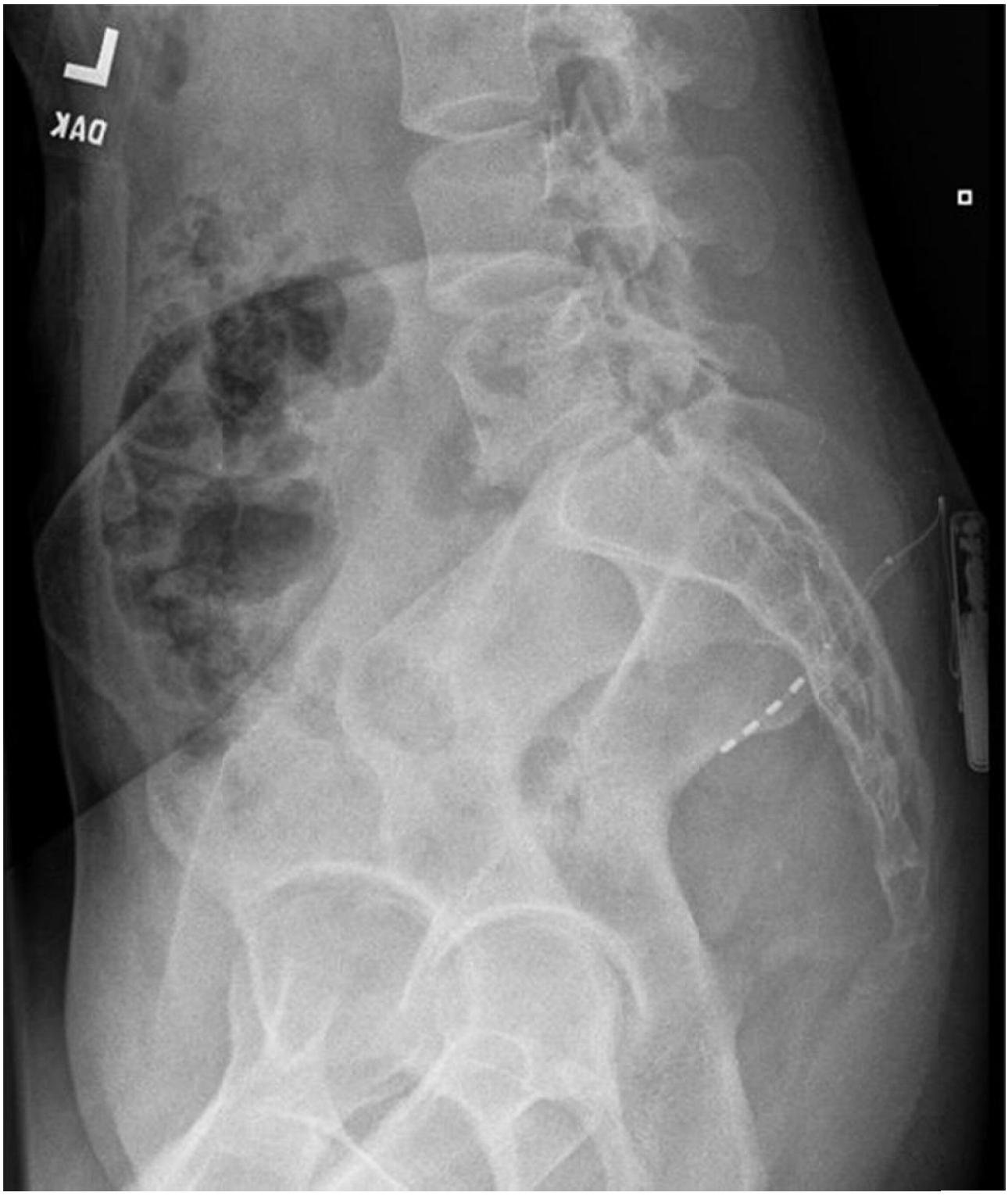
5. A two-year-old boy with normal penile development is explored for non-palpable testes through bilateral groin incisions. On each side, the vas deferens and spermatic vessels end blindly at the internal ring. The next step is:

A. observation.
B. CT scan of abdomen.
C. serum inhibin B and abdominal ultrasound.
D. FSH, LH, testosterone level, and stimulate with hCG.
E. diagnostic laparoscopy.

6. A 55-year-old woman, who had a sacral neuromodulation implant placed four years a ' ' clining efficacy despite several reprogramming sessions. A plain film X-ray is shown. The next step is:

A. revise ' ' ' e electrodes deeper.
B. revise ' ' ' e lead more laterally in S3.
C. revise ' ' ' e lead in S4.
D. revise ' ' ' e lead with ' 'et.
E. remove IPG and lead, initiate 200 units onabotulinumtoxinA injections.





7. A five-day-old boy has vomiting and dehydration. His serum CO_2 is 12 mEq/L, K^+ 5.5 mEq/L, and creatinine 2.2 mg/dL. A VCUG demonstrates PUV and bilateral grade 4 VUR. The next step is:

A. percutaneous cystostomy.
B. percutaneous nephrostomies.
C. valve ablation.
D. urethral catheter drainage.
E. cutaneous vesicostomy.

8. A 40-year-old man suffers a gunshot to the abdomen with left ureteral transection at the L3 vertebral level, and a ureteroureterostomy is performed. Post-operatively, he is not able to flex his thigh. These deficits are due to injury to the:

A. femoral nerve.
B. ilioinguinal nerve.
C. genitofemoral nerve.
D. lateral femoral cutaneous nerve.
E. obturator nerve.

9. A two-month-old, uncircumcised boy with a sacral dimple undergoes evaluation of a febrile UTI. Ultrasound shows bilateral hydroureteronephrosis and a conus medullaris at the mid-aspect of L4. VCUG shows bilateral grade 4 reflux and a normal urethra. The next step is:

A. CMG.
B. cystoscopy.
C. MAG-3 renal scan.
D. circumcision.
E. vesicostomy.

10. A 42-year-old man with azoospermia and primary infertility has a FSH of 15 mIU/L, small volume testes, and an otherwise normal physical examination. The factor that most reliability predicts his ability to have a biologic child is:

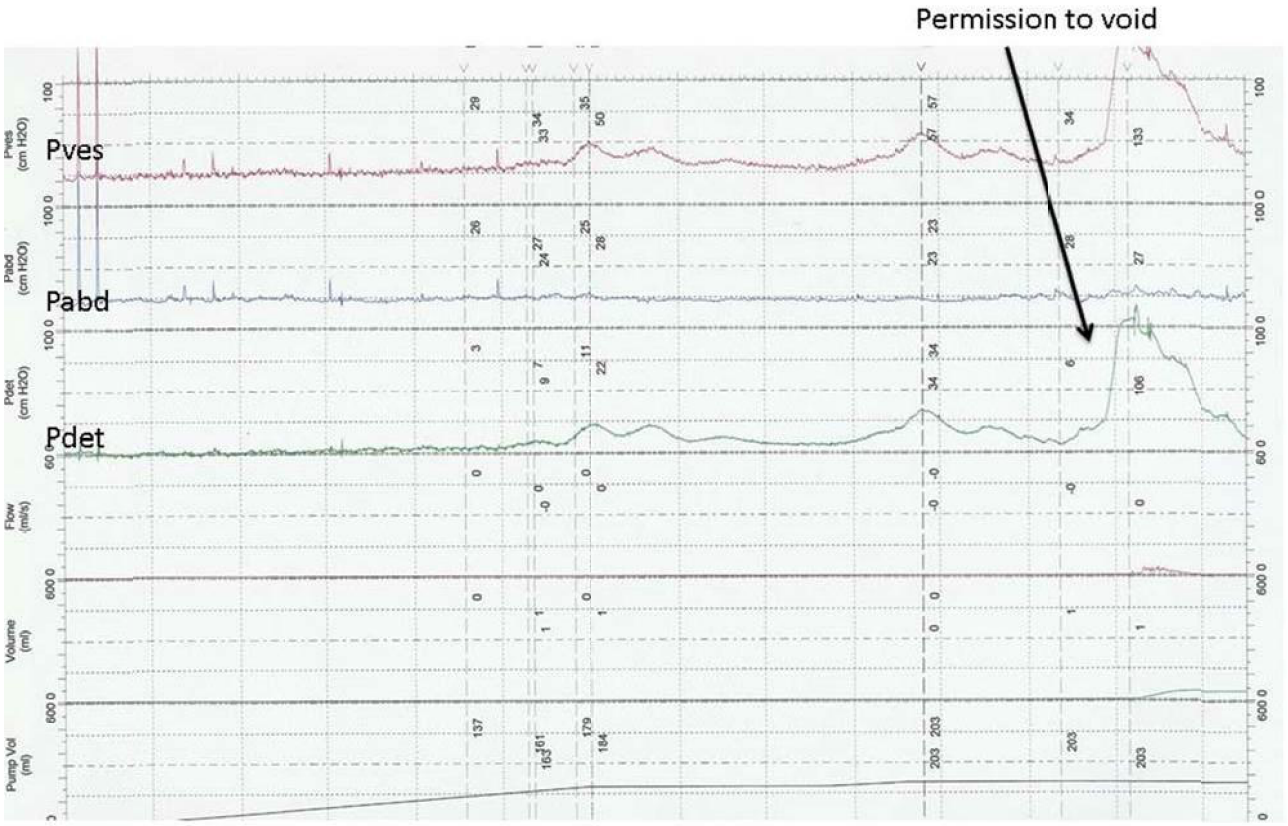
A. vasography.
B. serum FSH.
C. wife's fertility.
D. testicular volume.
E. testicular biopsy.

11. A 34-year-old woman is hypertensive. Laboratory studies reveal a serum sodium of 149 mEq/L, potassium 2.9 mEq/L, and CO_2 28 mEq/L. Plasma renin activity is suppressed. A CT scan reveals an enlarged left adrenal gland but no distinct mass. The next step is:

A. spironolactone.
B. nifedipine.
C. MRI scan of adrenal.
D. serum aldosterone:renin ratio.
E. adrenal vein aldosterone sampling.

12. A 67-year-old man has bothersome LUTS six months after hip surgery despite tamsulosin treatment. His urinalysis shows 0-2 RBC/hpf, and his PVR is 90 mL. DRE demonstrates 35 gm prostate. He undergoes urodynamics as shown. The next step is:

A. creatinine.
B. antimuscarinics.
C. scopy.
D. prostatic onabotulinumtoxinA.
E. TURP.



13. A 49-year-old man had a lesion of the glans penis and u xcisional biopsy. P eveals squamous cell CIS with a positive margin. Physical examination reveals a well-healed scar and no inguinal adenopathy. The next step is:

A. podophyllin.
B. brachytherapy.
C. excisi ous scar.
D. partial penectomy.
E. total penectomy.

14. A ten-day-old infant boy is hospitalized for failure to thrive. After his umbilical stump fell off, fluid has intermittently drained from the umbilicus. The umbilical fluid has a creatinine of 10 mg/dL and grows > 10^5 CFU/mL of E. coli. The next step should be antibiotics and:

A. observation.
B. urethral catheter drainage.
C. VCUG.
D. cauterization of tract.
E. closure of fistula.

15. A 76-year-old man with diabetes has hematuria. CT urogram shows a 5 mm filling defect in the distal right ureter. Ureteroscopic biopsy reveals a low grade urothelial carcinoma. The next step is:

A. nephroureterectomy.
B. ureteral stent and intravesical BCG.
C. segmental resection and ureteroureterostomy.
D. ureteroscopic tumor ablation.
E. distal ureterectomy and reimplantation.

16. A 72-year-old woman undergoes an abdominal hysterectomy. In the recovery room, she is anuric for four hours despite several boluses of I.V. fluids. Her indwelling catheter is patent, blood pressure is 100/50 mmHg, and pulse is 100 BPM. Her estimated blood loss during the procedure was 1000 mL. The best explanation for her condition is:

A. acute tubular necrosis.
B. bilateral ureteral obstruction.
C. prerenal azotemia.
D. hypovolemic shock.
E. bladder perforation.

17. The boundaries of a standard inguinal lymph node dissection for the treatment of penile cancer should include:

A. inguinal ligament, sartorius, adductor longus.
B. inguinal ligament, sartorius, fascia lata.
C. inguinal ligament, gracilis, adductor longus.
D. Cooper's ligament, sartorius, adductor longus.
E. Cooper's ligament, gracilis, adductor brevis.

18. A 17-year-old boy with spina bifida has a two-week history of fever and vague abdominal pain. He has a prior bladder a ··on, appendicovesicostomy, bladder nec' '' nd bilateral cross-trigonal ureteral reimplantation. Renal ultrasound is shown. The next step is antibiotics and:

A. observation.
B. tamsulosin.
C ' scopy and ureteral stent.
D. percutaneous nephrostomy tube.
E. CT cystogram.

19. 5-alpha-reductase deficiency is associated with:

A. poorly differentiated Wolffian structures.
B. presence of developed Müllerian structures.
C. gynecomastia.
D. elevated concentration of testosterone at puberty.
E. elevated dihydrotestosterone:testosterone ratio.

20. A 32-year-old woman with a solitary kidney underwent urinary diversion with an ileal conduit as a child. She has stable, moderate hydronephrosis, but her serum creatinine has risen to 2.8 mg/dL. A loopogram shows no reflux and no residual urine. A diuretic renogram reveals delay in uptake of the radiopharmaceutical and poor response to diuretic with a T1/2 of 22 minutes. The next step is:

A. hydrate and repeat the renogram.
B. contrast CT scan.
C. percutaneous nephrostomy tube.
D. renal biopsy.
E. revision of the ileal conduit.

21. A 60-year-old man has a high grade, T1 urothelial carcinoma of the bladder. He receives the fifth of six weekly instillations of intravesical BCG. Twelve hours later, he has a temperature of 39.5° C, difficulty breathing, and hypotension. The most likely cause of this complication is:

A. reflux of BCG into the upper tracts.
B. acute UTI.
C. traumatic catheterization.
D. more virulent strain of BCG.
E. impaired immunological state.

22. A 45-year-old man with a history of hypertension and significant tobacco use has erectile dysfunction one year following a crush injury to the pelvis. An arteriogram at the time of his injury revealed unilateral focal occlusion of the internal pudendal artery. Treatment should be:

A. intracavernous vasoactive injections.
B. dorsal venous ligation.
C. percutaneous angioplasty.
D. arterial revascularization.
E. penile prosthesis.

23. A 39-year-old man with a large, left varicocele requests vasectomy reversal four years after vasectomy. At scrotal exploration, he has rare non-motile sperm in the right vas deferens and an absence of sperm in clear fluid from the left vas deferens. The next step is:

A. bilateral vasovasostomy.
B. left varicocelectomy and bilateral vasovasostomy.
C. right vasovasostomy and left vasoepididymostomy.
D. left testis biopsy and intra-operative wet prep evaluation.
E. testicular sperm extraction.

24. A 21-year-old man develops a large dorsal hematoma after a seemingly superficial stiletto knife wound to his penis at the dorsal penoscrotal junction. He is able to void normally after the injury and has no urethral bleeding or gross hematuria. The next step is:

A. pelvic MRI scan.
B. retrograde urethrography.
C. urethroscopy.
D. antibiotics and wound closure.
E. exploration.

25. The initial response of the renal vasculature to complete ureteral obstruction is:

A. preglomerular vasodilatation.
B. postglomerular vasodilatation.
C. afferent arteriolar constriction.
D. efferent arteriolar constriction.
E. renal artery vasoconstriction.

26. A 54-year-old woman undergoes a continent cutaneous urinary diversion two years after pelvic radiation for cervical cancer. Four months later, she has right lower quadrant pain and fecaluria. A pouchogram reveals contrast extending into the colon adjacent to the pouch. The next step is:

A. hyperalimentation.
B. bilateral nephrostomy drainage.
C. pouch endoscopy and fulguration of fistula.
D. catheter drainage and low residue diet.
E. colonoscopy.

27. A 55-year-old man with bladder cancer undergoes a radical cystectomy. He is averse to an incontinent diversion. Intra-operative frozen-section reveals negative lymph nodes but invasive urothelial carcinoma at the prostatic apical margin. The next step is:

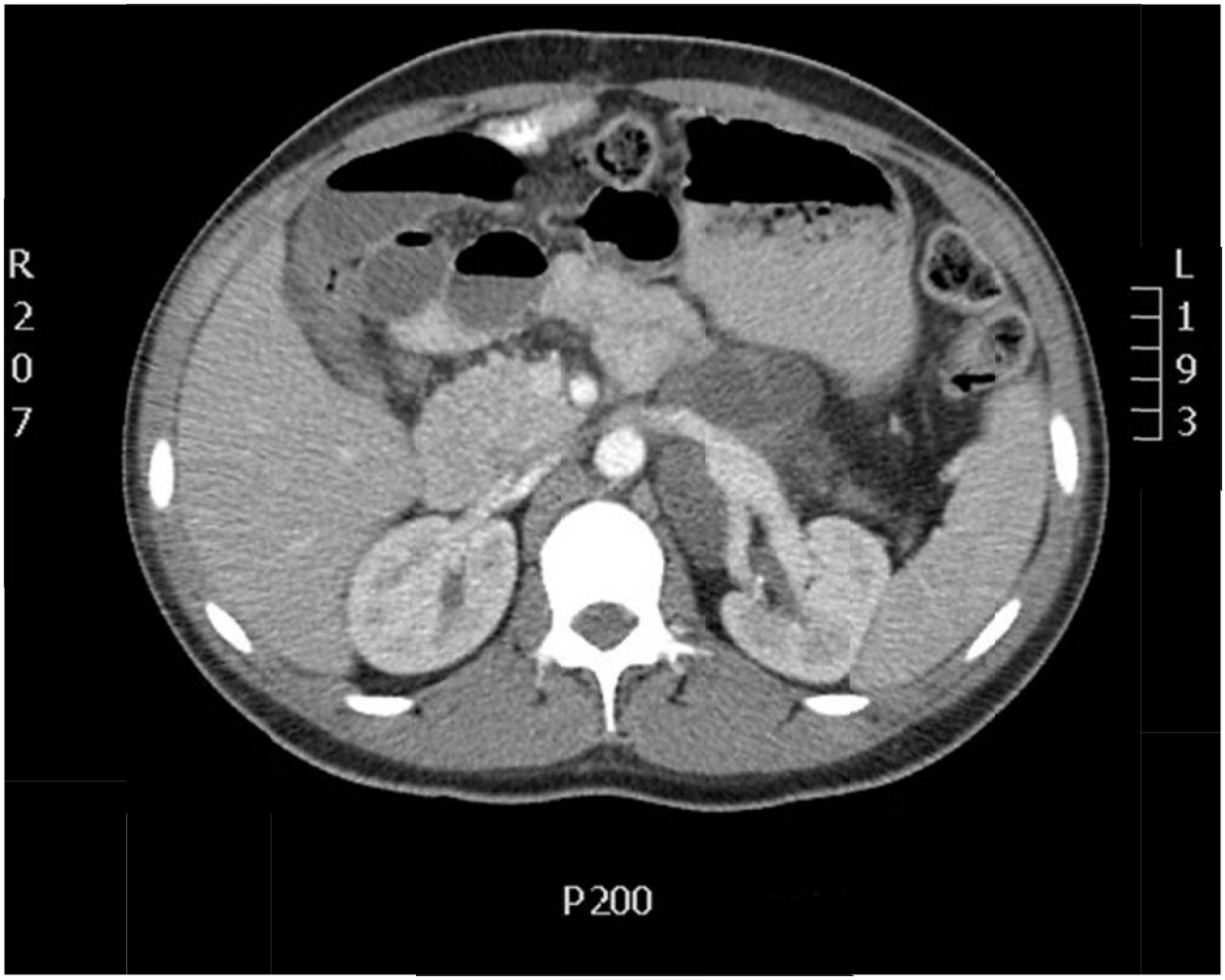
A. ileal neobladder.
B. ileal neobladder and adjuvant pelvic radiotherapy.
C. ileal neobladder and adjuvant chemotherapy.
D. ileal conduit.
E. continent cutaneous urinary diversion.

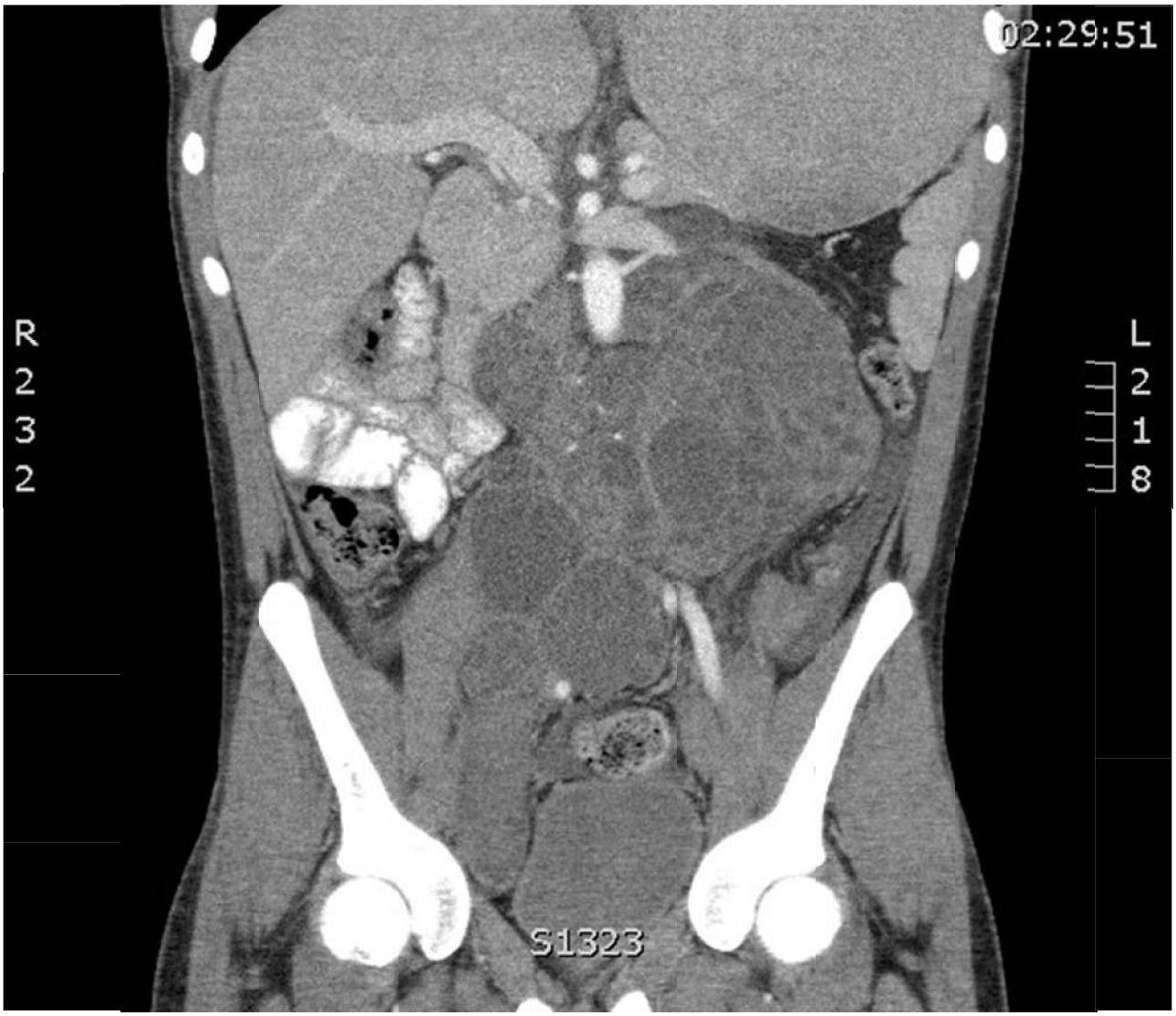
28. The vertebral level at which the conus medullaris in the neonate terminates is:

A. L1.
B. L3.
C. L5.
D. S1.
E. S3.

29. A 25-year-old man with negative tumor markers underwent a left radical orchiectomy with pathology revealing seminoma and immature teratoma. Chest CT scan is negative. CT scan images of the abdomen and pelvis are shown. The next step is:

A. PET CT scan.
B. percutaneous biopsy of the retroperitoneal mass.
C. three cycles of EP.
D. three cycles of BEP.
E. RPLND.





30. A 25-year-old man sustains perineal trauma and a pelvic fracture. A retrograde urethrogram shows contrast in the upper thigh. The initial tissue plane the contrast passed through to reach the thigh is:

A. Buck's fascia.
B. Colles' fascia.
C. fascia lata.
D. external spermatic fascia.
E. dartos fascia.

31. The prevalence of catheter-associated UTIs can be reduced by:

A. prophylactic oral antibiotics.
B. routine meatal cleansing.
C. antibiotic irrigation of the bladder.
D. maintenance of a closed drainage system.
E. hydrogen peroxide instillation into the drainage bag.

32. Transection of the dorsal nerve roots at S2-S4 results in:

A. urinary incontinence.
B. detrusor sphincter dyssynergia.
C. loss of psychogenic erections.
D. anejaculation.
E. decreased penile sensation.

33. A 24-year-old man has recurrent cystine nephrolithiasis. Urine volume is more than 3.0 L/day. He is taking alpha-mercaptoproprionylglycine (Thiola®) and potassium citrate tablets three times per day with no side effects. He notes that his stools are filled with tablet-like material. The best recommendation is:

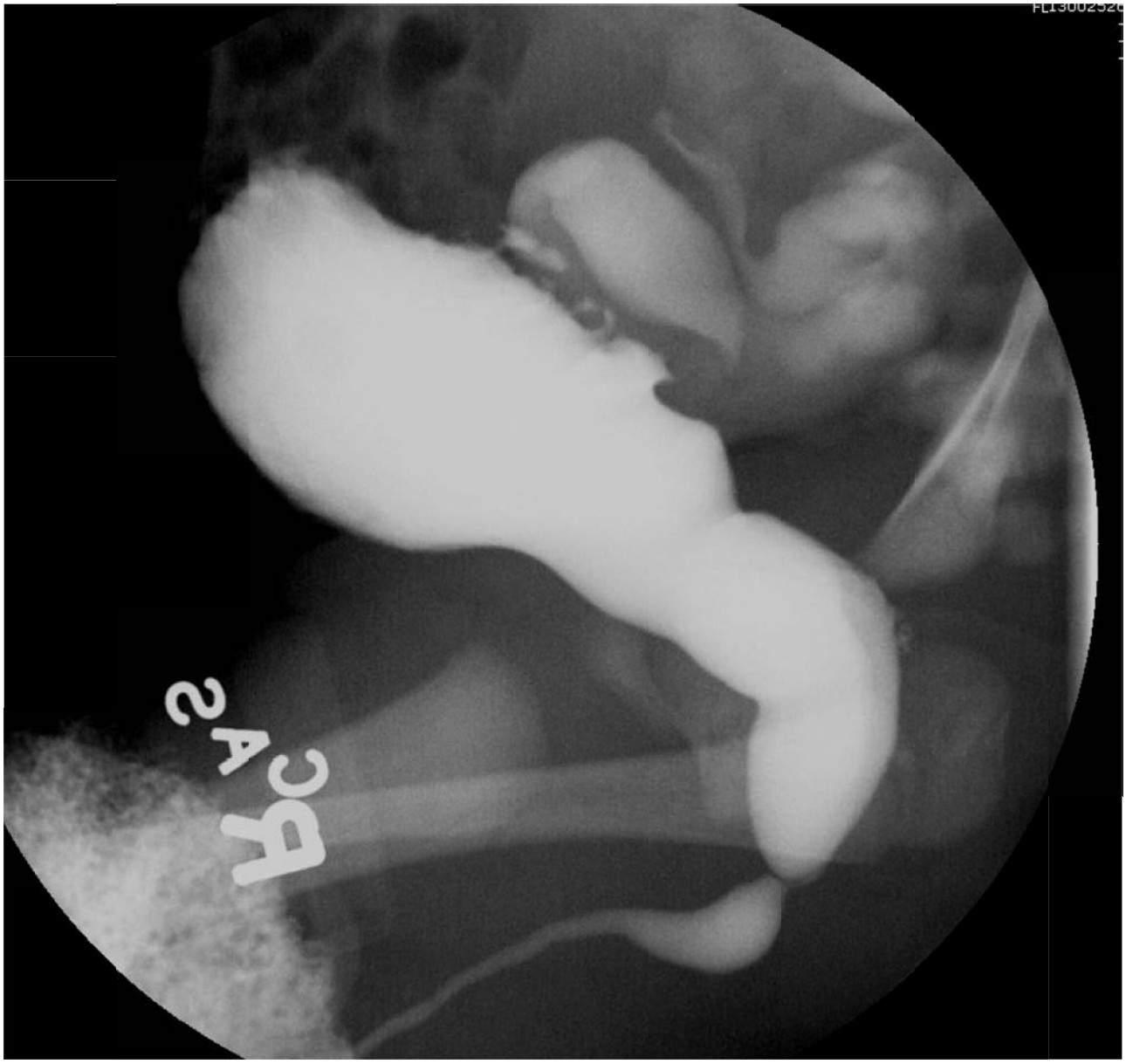
A. reassurance.
B. take the tablets before meals.
C. evaluate for malabsorption.
D. change Thiola® to D-penicillamine.
E. change potassium citrate formulation.

34. A 35-year-old man with Hodgkin's disease has not voided for 18 hours. He is being treated with abdominal XRT and chemotherapy. The most likely cause of anuria is:

A. bilateral ureteral obstruction from retroperitoneal lymphoma.
B. radiation enteritis with dehydration.
C. acute tubular necrosis.
D. renal tubular obstruction with uric acid crystals.
E. acute radiation nephritis.

35. A one-day-old boy has a history of severe prenatal bilat ureteronephrosis and oligohydramnios diagnosed at 19 weeks of gestation. Postnatal ultrasound confirms bila oureteronephrosis and his VCUG is shown. The most common cause of neonatal mortality is:

A. urosepsis.
B. acute renal failure.
C nary hypoplasia.
D. urinary ascites.
E. congenital cardiac disease.



36. The VHL tumor suppressor gene regulates the expression of:

A. basic fibroblastic growth factor.
B. epidermal growth factor receptor.
C. c-Met proto-oncogene.
D. VEGF.
E. transforming growth factor beta.

37. A 65-year-old man with rectal carcinoma treated by abdominal perineal resection develops urinary incontinence two years later. His urinalysis is normal and PVR is 300 mL. Renal ultrasound demonstrates moderate bilateral hydronephrosis. The most likely urodynamic findings are:

A. detrusor overactivity with bladder outlet obstruction.
B. detrusor overactivity with detrusor external sphincter dyssynergia.
C. detrusor areflexia with normal compliance.
D. detrusor areflexia with reduced compliance.
E. impaired bladder contractility with intrinsic sphincter deficiency.

38. A 54-year-old woman, with a history of cervical cancer treated with radiation therapy five years ago, undergoes a TUR of a 2 cm mass above the left ureteral orifice. Final pathology reveals an inverted papilloma. On the third post-operative day, she develops continuous urinary incontinence. CT urogram reveals no evidence of upper tract pathology, perivesical abscess, or urinoma. Subsequent cystoscopic evaluation reveals a 2 cm vesicovaginal fistula at the site of the resection. The next step is:

A. cauterization of the fistula site and placement of a urethral catheter.
B. immediate transvaginal repair.
C. transvaginal repair in three months.
D. immediate transabdominal repair.
E. transabdominal repair in three months.

39. A 50-year-old man is scheduled for a living-related renal transplant. He has a serum creatinine of 5.5 mg/dL and is not yet on dialysis. His non-contrast CT scan shows a 2 cm solid left renal mass. The next step is:

A. repeat CT scan with I.V. contrast.
B. radical nephrectomy and exclude patient from transplantation.
C. simultaneous radical nephrectomy and renal transplantation.
D. radical nephrectomy, transplant in two years if no recurrence.
E. partial nephrectomy, transplant in two years if no recurrence.

40. Cranberry juice may help prevent UTI by reducing:

A. urine pH.
B. urine osmolality.
C. secretory IgA.
D. bacterial adhesion.
E. interleukin 6 (IL-6).

41. A neonate with a 3 cm phallus and non-palpable gonads can be confirmed to have at least one testicle by:

A. 46 XY karyotype.
B. elevated 17-hydroxyprogesterone.
C. normal LH, FSH levels.
D. normal Müllerian inhibiting substance concentration.
E. increased urinary ketosteroids.

42. A 78-year-old man had a radical cystectomy and ileal conduit for recurrent bladder cancer. Pathology showed stage pT3bN0M0 cancer. CT scan at one year was normal, but at two years, there was marked right hydroureteronephrosis with very thin residual renal parenchyma. Loopogram shows a tight narrowing of the right distal ureter 2 cm above the ureteroileal junction. He is asymptomatic and serum creatinine is 1.6 mg/dL. The next step is:

A. observation.
B. retrograde balloon dilation of the ureter.
C. percutaneous laser incision of the stricture.
D. open reimplantation of the ureter into the ileum.
E. right nephroureterectomy.

43. In the process of spermatogenesis, the final product of meiosis is the:

A. spermatogonia.
B. primary spermatocyte.
C. secondary spermatocyte.
D. spermatid.
E. spermatozoa.

44. Complications associated with inguinal lymph node dissection for penile cancer are documented to occur most frequently in which of the following settings:

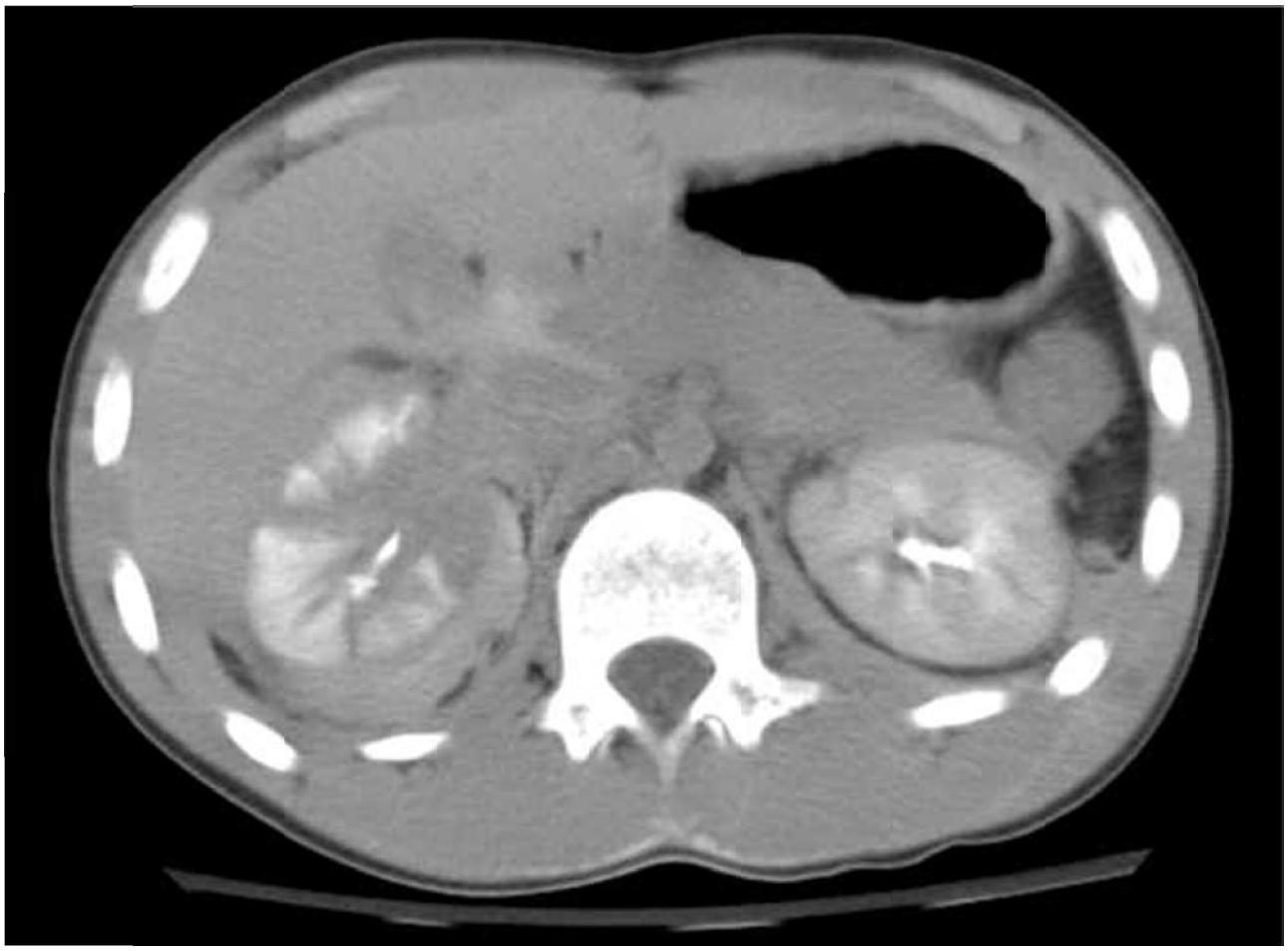
A. palliative indication.
B. prior chemotherapy.
C. insulin-dependent diabetes.
D. congestive heart failure.
E. obesity.

45. An 80-year-old man has urinary retention. He has bilateral pitting edema, an elevated jugular venous pulse, and a blood pressure of 200/120 mmHg. His creatinine is 4.0 mg/dL. The serum K^+ and Na^+ are normal. An ultrasound shows a very distended bladder and bilateral pelvicaliectasis. Three liters of urine is obtained from his bladder when he is catheterized. Urine output over the next two hours is 700 mL. The next step is:

A. serial creatinine measurement.
B. replace output mL per mL with D5 1/2 NS.
C. monitor fluid intake and output every four hours.
D. monitor postural blood pressure for two hours.
E. spot check urine for osmolality, sodium, and potassium.

46. A 15-year-old boy is involved in ' ' ' eed MVC. His vital signs are stable. Urinalysis reveals 25-50 RBC/hpf. An abdominal CT scan with I.V. contrast is shown. The next step is:

A. observation.
B. delayed CT imaging.
C. arteriography.
D. retrograde pyelogram.
E. immediate renal exploration.



47. Stent placement after uncomplicated ureteroscopic stone extraction for a 5 mm distal ureteral calculus:

A. is indicated if intracorporeal lithotripsy is performed.
B. improves stone-free rate.
C. increases post-procedure pain.
D. is indicated if balloon dilation was performed.
E. reduces the likelihood of ureteral strictures.

48. A 27-year-old woman is prescribed a ten day course of an oral quinolone for a pan-sensitive E. coli UTI. Four days later, she develops a low-grade fever to 38° C and a skin rash. Urinalysis shows 1+ protein with WBC casts, occasional eosinophils, and 5-10 RBC/hpf. Urine gram stain is negative for bacteria. Serum creatinine is 1.8 mg/dL. The next step is discontinuation of quinolone antibiotics and:

A. observation.
B. change to ampicillin.
C. change to cephalosporin.
D. oral antihistamines.
E. prednisone.

49. A 28-year-old, paraplegic man had a sphincterotomy seven years ago and wears a condom catheter. During an evaluation for renal insufficiency, renal ultrasound reveals bilateral hydroureteronephrosis. The parameter or study most predictive of this complication is:

A. EMG.
B. CMG.
C. Valsalva LPP.
D. detrusor LPP.
E. urethral pressure profilometry.

50. Stage 3 prolapse in the Pelvic Organ Prolapse Quantification (POPQ) system occurs when the most distal portion of the prolapse is:

A. 1 cm or less proximal or distal to the hymenal plane.
B. 1 cm or less proximal or distal to the introitus.
C. > 1 cm distal to the hymen; entire vagina has not prolapsed.
D. > 1 cm distal to the introitus; entire vagina has not prolapsed.
E. associated with complete vaginal eversion.

51. A 64-year-old man undergoes a six core biopsy for a PSA of 5.6 ng/mL. Pathology is a Gleason 6 (3+3) prostate cancer in a single core involving less than 10% of the tissue. The other cores are normal. He prefers active surveillance. The next step is:

A. CT scan.
B. initiate finasteride.
C. repeat prostate biopsy with 12 or more cores.
D. check PSA quarterly and repeat biopsy in one year.
E. counsel patient that he is not appropriate for active surveillance.

52. Randall's plaques are composed of:

A. calcium oxalate.
B. calcium apatite.
C. brushite.
D. hydroxyproline.
E. cholesterol.

53. The C-arm fluoroscopic operational factor resulting in an increased radiation dose to both the patient and operating room personnel is:

A. increasing tube kilovoltage (kVp).
B. increasing tube current (mA).
C. decreasing image intensifier to skin distance.
D. removing the image intensifier grid.
E. increasing the X-ray tube (source) to skin distance.

54. Parathyroid hormone level is suppressed in a patient with:

A. obesity.
B. a recent renal transplant.
C. renal calcium leak.
D. absorptive hypercalciuria.
E. renal insufficiency.

55. Following TURBT for papillary urothelial carcinoma of the bladder, peri-operative instillation of mitomycin C:

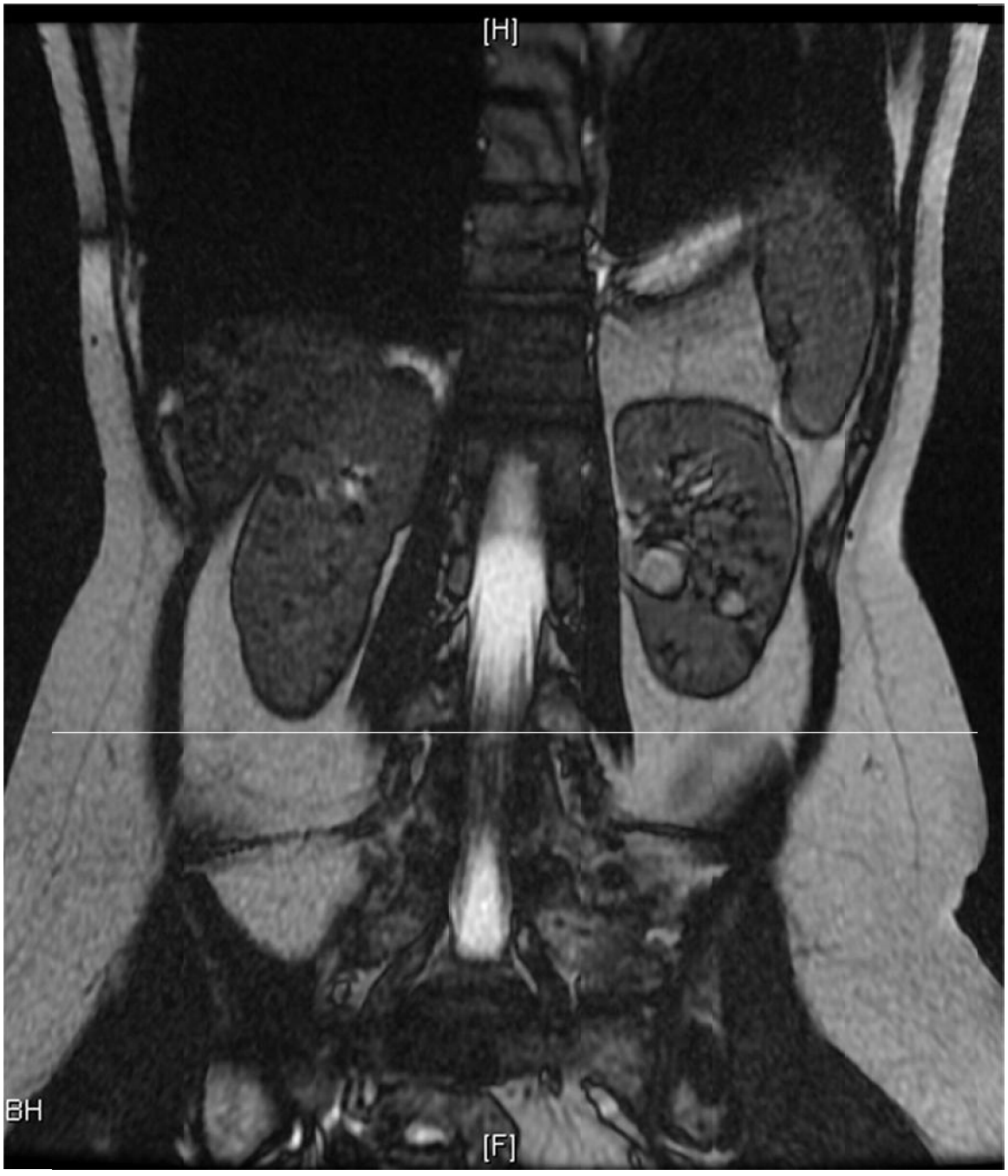
A. is unnecessary for small, solitary, low grade tumors.
B. is most effective in acidic urine.
C. should be given within 24 hours of the resection.
D. should be followed by an induction course of intravesical therapy.
E. should be delayed for 24 hours if an extraperitoneal perforation occurs.

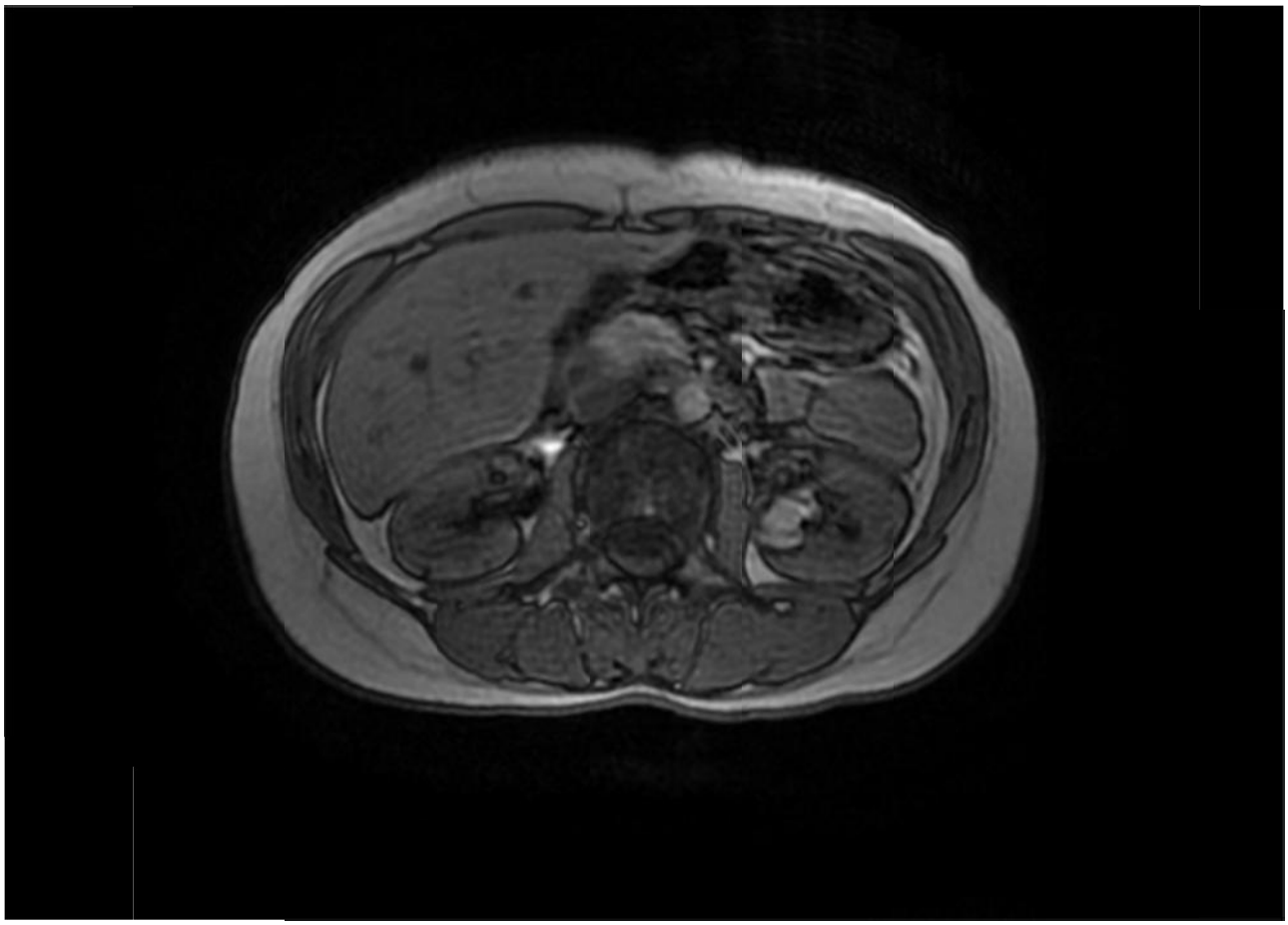
56. The signal intensity of prostate cancer on T1 and T2 weighted MRI scan images is:

A. high T1 and high T2.
B. low T1 and high T2.
C. high T1 and low T2.
D. low T1 and low T2.
E. intermediate T1 and high T2.

57. A 21-year-old woman undergoes resection of a cystic lung mass. Th[illegible]ology reveals lymphangioleiomyomatosis (LAM). Abdominal T1 MRI scan is shown. The most likely diagnosis is:

A. VHL.
B. Birt-Hogg-Dubé.
C. tuberous sclerosis.
D. hereditary papillary RCC.
E. familial leiomyomatosis RCC.





58. A 23-year-old woman with cystic fibrosis takes nutritional supplements, Vitamin C, and antibiotic prophylaxis to prevent respiratory infections. She ha ' aluria and recurrent calcium oxalate stones. The most likely cause of her stones is:

A. Vitamin C therapy.
B. reduction of intestinal Oxalobacter formigenes.
C ' ' ' calcium diet.
D. cystic fibrosis-associated ileal absorption disorder.
E. dietary glycine excess.

59. A 45-year-old man with metastatic RCC involving the lung, liver, lymph nodes, and bone undergoes a right radical nephrectomy. His pre-operative labs include a hemoglobin of 9 gm/dL and a calcium of 11.5 mg/dL. The treatment most likely to prolong overall survival is:

A. temsirolimus.
B. interferon alpha.
C. bevacizumab.
D. sorafenib.
E. sunitinib.

60. A one-year-old, uncircumcised boy with spina bifida is managed with CIC and oxybutynin. Ultrasound and VCUG are normal. He has recurrent asymptomatic episodes of cloudy urine. A recent urinalysis shows 10-20 WBC/hpf and a urine culture grows 10^5 E. coli. The next step is:

A. observation.
B. treat with culture specific antibiotics and start prophylaxis.
C. gentamicin bladder irrigations.
D. circumcision.
E. vesicostomy.

61. A 40-year-old woman has chronic renal insufficiency and a creatinine of 2.5 mg/dL. The medication that will increase the serum creatinine but not alter the true GFR is:

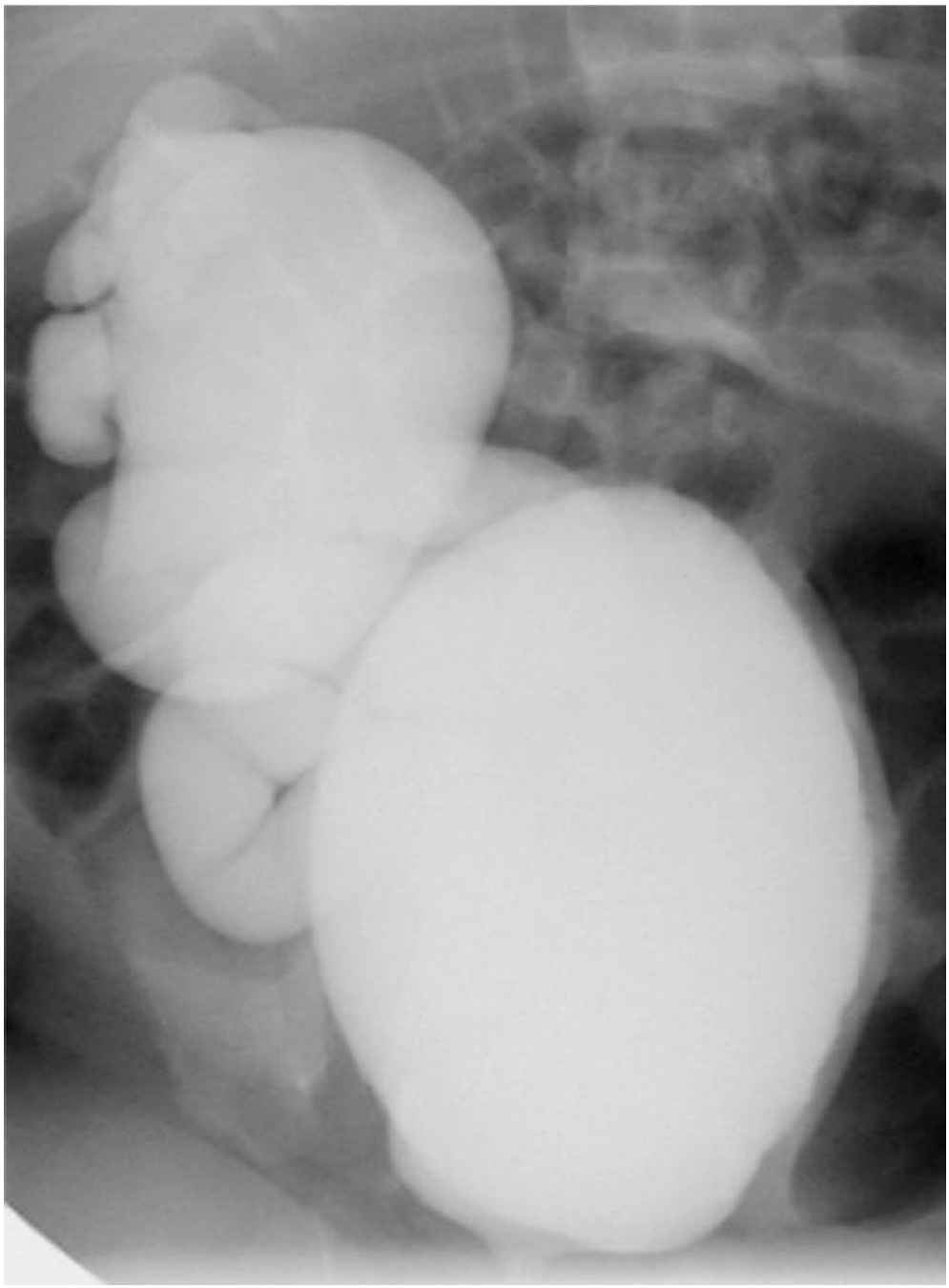
A. captopril.
B. cephalexin.
C. trimethoprim.
D. spironolactone.
E. cisplatin.

62. The most important clinical or pathologic parameter associated with progression of non-muscle-invasive bladder cancer is:

A. tumor stage.
B. early recurrence.
C. location.
D. presence of mutant p53.
E. age.

63. A three-year-old girl has recurrent febrile UTIs in spite of prophylactic antibiotics. Her VCUG is shown. The next step is:

A. creatinine clearance.
B. DMSA scan.
C. MR urogram.
D. urodynamics.
E. ureteral reimplantation.



64. A 78-year-old man with dilated cardiomyopathy and obstructive pulmonary disease underwent percutaneous radiofrequency ablation of an enlarging 2.7 cm renal mass. Six months later, MRI scan demonstrates persistent contrast-enhancement within the periphery of the tumor. The next step is:

A. MRI scan in six months.
B. renal mass biopsy.
C. PET scan.
D. repeat percutaneous ablation.
E. partial nephrectomy.

65. A 52-year-old woman develops continuous leakage of clear fluid from her vagina six weeks following a laparoscopic transabdominal hysterectomy for benign disease. A CT urogram is unremarkable and cystoscopy reveals a subtrigonal 1 cm vesicovaginal fistula between the posterior wall of the bladder and the mid-vagina. The next step is:

A. placement of urethral catheter and repeat evaluation in six weeks.
B. cystoscopy and fulguration of the fistula.
C. immediate transvaginal repair.
D. immediate transabdominal repair.
E. transabdominal repair in three months.

66. A 62-year-old man undergoes a TURBT for a lesion at the bladder dome. Final pathology reveals muscle-invasive small cell carcinoma. Metastatic work-up is negative. The next step is:

A. repeat TURBT.
B. neoadjuvant chemotherapy.
C. XRT.
D. partial cystectomy.
E. radical cystoprostatectomy.

67. A 45-year-old, obese man has hypertension, new onset diabetes, and general weakness. Two 24-hour urine collections show elevated cortisol levels. The next step is:

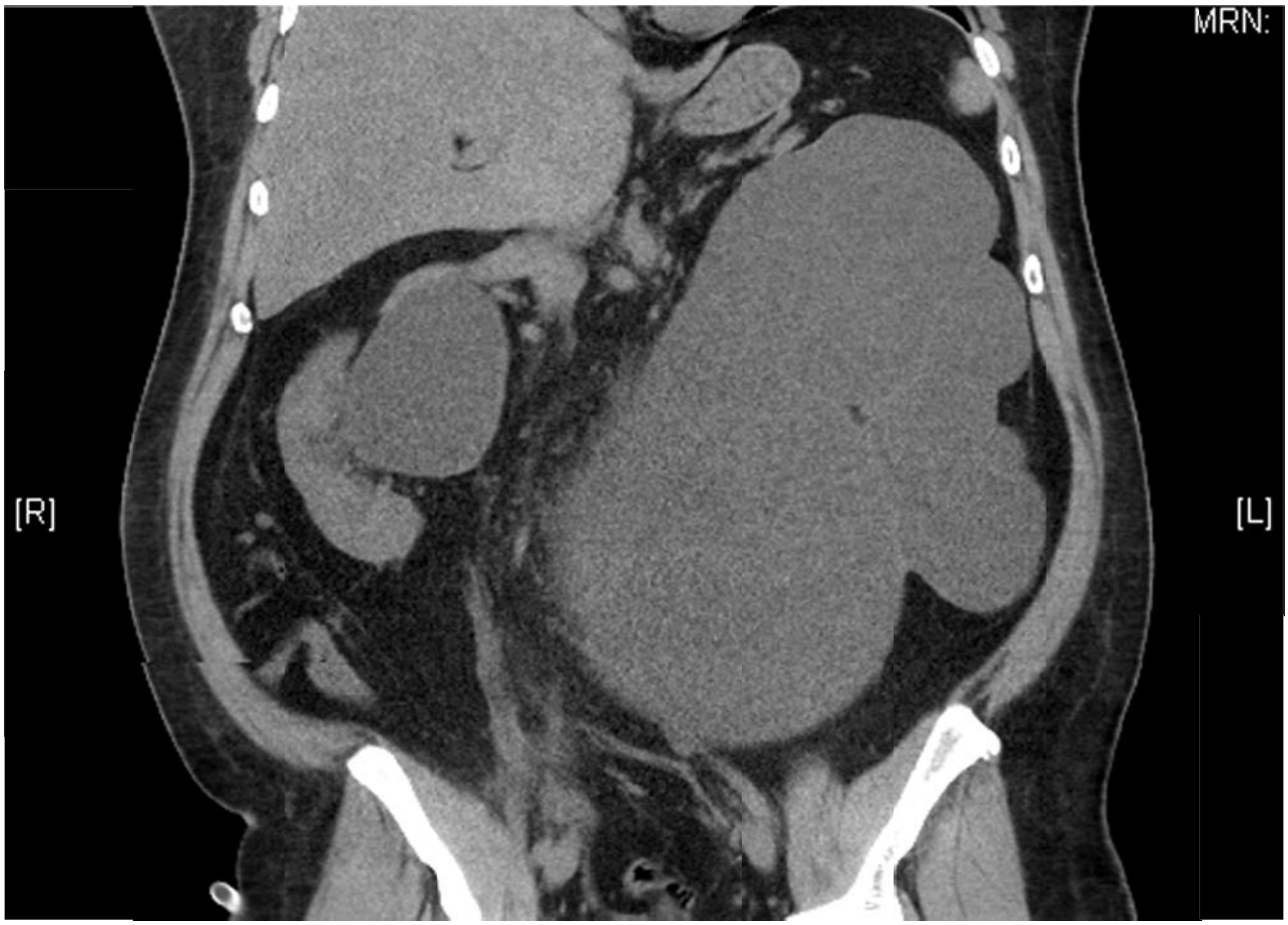
A. low-dose dexamethasone test.
B. plasma corticotrophin (ACTH).
C. high-dose dexamethasone test.
D. metyrapone test.
E. abdominal CT scan.

68. A 24-year-old man has stage 1 pure seminoma without vascular invasion. He is reluctant to undergo adjuvant XRT. An alternative to observation is one cycle of:

A. paclitaxel.
B. etoposide.
C. bleomycin.
D. carboplatin.
E. ifosfamide.

69. An asymptomatic, 75-year-old man with multiple medical co-morbidities has the incidental finding on CT scan as shown. Serum creatinine is 1.0 mg/dL. The appropriate management of the left kidney is:

A. observation.
B. urete[illegible]acement with interval changes.
C. percutaneous nephrostomy with interval changes.
D. laparoscopic pyeloplasty.
E. nephrectomy.



70. A nine-year-old girl with spina bifida has urinary incontinence. Urodynamics shows normal capacity with good compliance and a low Valsalva LPP. She has a fascial sl[illegible]'s initially dry. Four months later, she has recurrent incontinence. Ultrasound is normal. Videourodynamics demonstrate a bladder capacity of 250 mL, a pressure-specific bladder capacity of 150 mL at 30 cm H_2O, a detrusor LPP of 60 cm of H_2O, and bilateral grade 1 reflux. The next step is:

A. prophylactic antibiotics.
B. oral antimuscarinic.
C. endoscopic injection of bladder neck.
D. bladder augmentation.
E. bilateral ureteral reimplantation.

71. A 53-year-old man with a PSA of 2.7 ng/mL undergoes 12-core TRUS prostate needle biopsy. Pathology reveals focal high-grade PIN and atypical adenomatous hyperplasia (adenosis). The next step is:

A. examine multiple deeper tissue sections of current biopsy.
B. immediate repeat 12-core TRUS biopsy.
C. immediate saturation biopsy.
D. repeat PSA in six months.
E. TRUS biopsy in six months.

72. A morbidly obese, 55-year-old woman undergoes Roux-En-Y bypass. In order to minimize stone risk, the best treatment is:

A. aggressive hydration.
B. calcium carbonate.
C. hydrochlorothiazide.
D. potassium citrate.
E. allopurinol.

73. A 61-year-old man with Parkinson's disease has urinary frequency, urgency, urinary incontinence, and weak stream. Pressure-flow urodynamics reveal detrusor overactivity, a sustained voiding detrusor pressure of 88 cm H_2O, and a maximum flow of 7 mL/sec. Cystometric bladder capacity is 275 mL. PVR is 150 mL. The next step is:

A. antimuscarinic.
B. baclofen.
C. alpha-blocker.
D. CIC.
E. laser vaporization of prostate.

74. A 52-year-old woman is G4P4 and reports urinary incontinence with physical activities. On physical exam, she is found to leak with cough. Aa point is at -3 and Ap point is at -3, while Ba and Bp points are at -2 on pelvic exam, and she can contract her pelvic floor muscles during exam. She has no other medical problems and has not previously sought care for her incontinence. The next step is:

A. urodynamic testing.
B. pelvic floor muscle training.
C. biofeedback.
D. mid-urethral sling and cystocele repair.
E. mid-urethral sling and rectocele repair.

75. A 62-year-old man with bothersome LUTS has an AUA Symptom Score of 26 despite an adequate trial of an alpha-blocker and finasteride. DRE reveals a 40 gm benign prostate. His PSA six months ago was 2.3 ng/mL. Prior to laser prostatectomy, the next step is:

A. urinalysis.
B. repeat PSA.
C. uroflowmetry.
D. cystoscopy.
E. pressure flow urodynamics.

76. The most common site of sympathetic nerve injury during a RPLND is the:

A. aortorenal ganglion adjacent to the renal hilum.
B. sympathetic chain inferior to the renal artery.
C. aortic plexus posterolateral to the aorta.
D. inferior mesenteric plexus adjacent to the inferior mesenteric artery.
E. hypogastric plexus anterior to the aortic bifurcation.

77. A 50-year-old man is diagnosed with an asymptomatic, 15 mm stone in an anterior upper pole caliceal diverticulum. The best management is:

A. observation.
B. SWL.
C. ureteroscopy, laser incision of diverticular neck, and lithotripsy.
D. PCNL and dilation of the diverticular neck.
E. laparoscopic removal of stone and ablation of diverticulum.

78. A 52-year-old woman underwent a percutaneous needle biopsy of the right kidney. Two months later, she has hypertension. Upon examination, an abdominal bruit is heard in the right upper quadrant. A renal arteriogram demonstrates an arteriovenous fistula in the lower pole of the right kidney. She is asymptomatic with blood pressure well-controlled by medication and has a serum creatinine of 1.4 mg/dL. The next step is:

A. observation.
B. selective embolization.
C. partial nephrectomy.
D. operative ligation.
E. nephrectomy.

79. A 71-year-old man with a PSA of 14 ng/mL undergoes radical prostatectomy for cT2aN0M0 Gleason score 8 (4+4) prostate cancer. Final pathology is Gleason 7 (4+3) with negative margins, however, seminal vesicle and bladder neck invasion is found. In this patient, the feature associated with the highest risk of recurrence is:

A. PSA.
B. biopsy Gleason score.
C. seminal vesicle invasion.
D. bladder neck invasion.
E. prostatectomy Gleason score.

80. A ten-year-old boy has nocturnal enuresis, daytime dampness, and two febrile UTIs. Treatment with antibiotics fails to resolve his incontinence. An ultrasound reveals no hydronephrosis. KUB reveals no bladder stones, voiding and postvoid films from a VCUG are shown. The next step is timed voiding and:

A. retrograde urethrogram.
B. urodynamics.
C. alpha-blockers.
D. antimuscarinic therapy.
E. endoscopic valve ablation.

81. A 55-year-old man has a PSA of 1.7 ng/mL. His DRE reveals a suspicious prostatic nodule consistent with a cT3 prostate cancer. TRUS-guided prostatic biopsies reveal small cell carcinoma of the prostate. Metastatic evaluation is negative. The next step is:

A. systemic chemotherapy.
B. hormonal therapy.
C. XRT.
D. neoadjuvant and concurrent hormonal therapy and XRT.
E. radical prostatectomy and bilateral pelvic lymph node dissection.

82. The most appropriate peri-operative management of a patient undergoing adrenalectomy for Cushing's syndrome is:

A. hydration, alpha-blockers, and stress-dose steroids.
B. beta-blockers, stress-dose steroids, and careful glycemic control.
C. potassium sparing diuretics and stress-dose steroids.
D. stress-dose steroids and careful glycemic control.
E. potassium sparing diuretics, stress-dose steroids, and careful glycemic control.

83. A 48-year-old man with VHL has a 2 cm, solid, right adrenal mass in addition to multiple small (1-2 cm) bilateral renal masses. He is not hypertensive, but serum catecholamines are slightly elevated and the adrenal mass is bright on T2-weighted MRI scan. The next step is alpha-blockade and:

A. observation.
B. percutaneous biopsy of the adrenal mass.
C. partial adrenalectomy.
D. adrenalectomy.
E. adrenalectomy and partial nephrectomy.

84. A healthy, four-year-old boy has a one-month history of voiding every 15-20 minutes during the day. He is continent, denies nocturia, and has not had any UTIs. He has normal daily bowel movements. Urinalysis is normal. The next step is:

A. reassurance.
B. VCUG.
C. urodynamic study.
D. oxybutynin.
E. cystoscopy.

85. The most likely location for corporal perforation during penile prosthesis placement is:

A. dorsally.
B. ventrally.
C. at the septum.
D. distally (near glans).
E. proximally (near insertion).

86. The abdomi ' '' raph in a 60-year-old man is shown. The condition that is most commonly associated with this finding is:

A. sarcoidosis.
B. diabetes mellitus.
C. uncontrolled hypertension.
D. tuberculosis.
E. milk-alkali syndrome.

87. A recurrent calcium oxalate stone former has an isolated finding of marked hypomagnesuria on metabolic evaluation. The next step is:

A. discontinuation of allopurinol.
B. evaluate for an underlying bowel disorder.
C. oral magnesium supplementation.
D. increase intake of tofu and brown rice.
E. potassium citrate.

88. A newborn girl has a history of prenatal bilateral moderate hydronephrosis (anterioposterior pelvic diameter of 8 mm) without ureteral dilation. On day two of life, ultrasound reveals no hydronephrosis. The next step is:

A. no further evaluation needed.
B. serum creatinine at one week.
C. repeat ultrasound at six weeks of age.
D. VCUG.
E. radionuclide renal scan.

89. A three-year-old boy, with a history of daytime wetting and recurrent infections, is found to have bilateral grade 3 VUR. The most important factor in predicting risk of breakthrough UTI is:

A. age.
B. intrarenal reflux.
C. renal scarring.
D. circumcision status.
E. bladder and bowel dysfunction.

90. A 55-year-old patient with a mechanical aortic valve and penicillin allergy is scheduled to undergo urodynamic testing. Urinalysis on the day of testing is unremarkable. The indicated antibiotic prophylaxis is:

A. none.
B. ciprofloxacin.
C. vancomycin and gentamicin.
D. clindamycin and gentamicin.
E. trimethoprim-sulfamethoxazole.

91. The most potent stimulator of aldosterone secretion is:

A. ACTH.
B. angiotensin II.
C. renin.
D. potassium.
E. sodium.

92. A 53-year-old woman has recurrent stress incontinence despite two previous mid-urethral slings and a urethral bulking injection. A videourodynamic study shows no detrusor overactivity, with a maximal bladder capacity of 300 mL. Stress urinary incontinence is documented with a Valsalva LPP of 22 cm H_2O at 200 mL and again at maximum capacity. The urethra has minimal mobility with straining. The next step is:

A. pelvic floor muscle exercises with biofeedback.
B. off-label imipramine.
C. sacral neuromodulation.
D. retropubic mid-urethral polypropylene sling.
E. autologous pubovaginal sling.

93. A 15-year-old boy has right flank pain after being struck in the back with a lacrosse stick during a match five hours ago. Vital signs are normal. Urinalysis reveals clear urine with 10-20 RBCs, and hemoglobin is 15 g/dL. The next step is serial physical exams and:

A. repeat urinalysis.
B. abdominal ultrasound.
C. single phase CT scan of abdomen.
D. triphasic CT scan of abdomen.
E. MRI scan.

94. Patients with type 2 (proximal) RTA do not form renal calculi because they differ from those with type 1 (distal) RTA in the renal handling of:

A. calcium.
B. citrate.
C. bicarbonate.
D. phosphate.
E. sodium.

95. A 40-year-old man involved in an MVC has mild lower abdominal pain and gross hematuria. Radiologic evaluation reveals a normal urethra, a pelvic fracture with a large pelvic hematoma, and a small 1-2 cm extraperitoneal extravasation from the bladder. A 26 Fr urethral catheter repetitively clots off. The next step is:

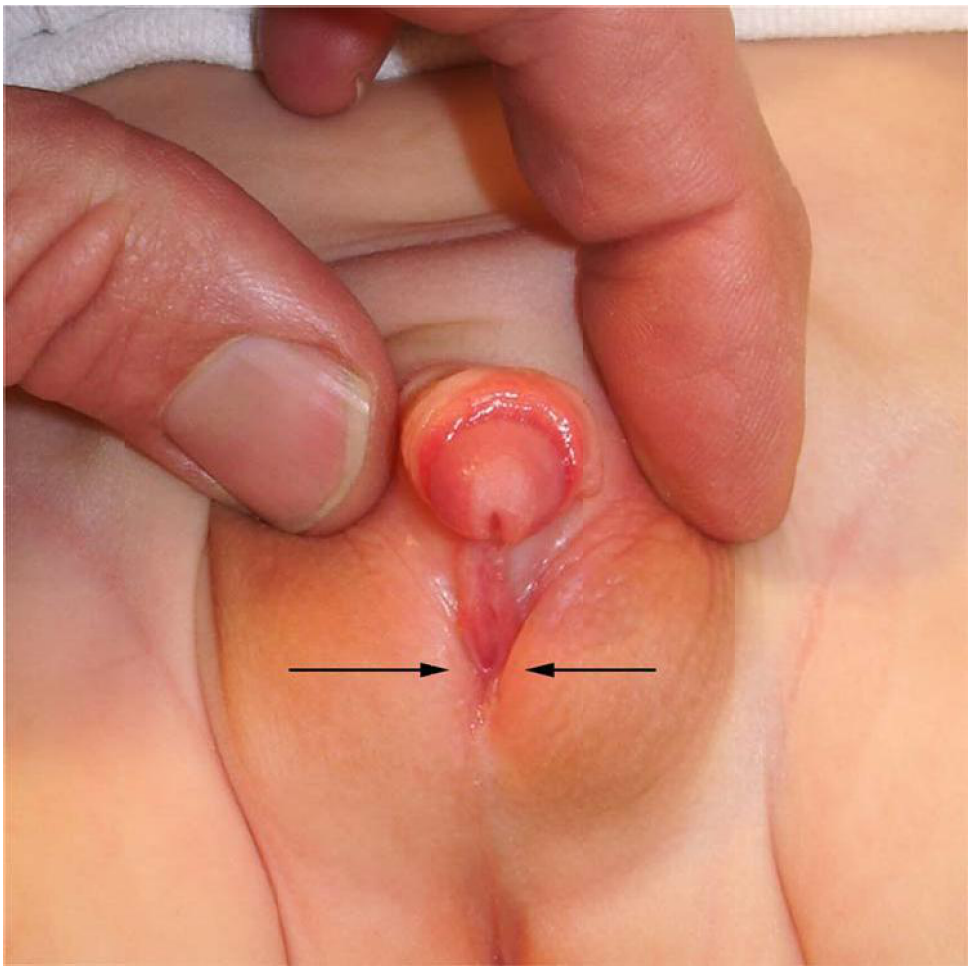
A. place three-way urethral catheter and begin continuous bladder irrigation.
B. percutaneous suprapubic tube placement.
C. cystoscopy with clot evacuation.
D. extraperitoneal exploration of bladder, repair of laceration, and catheter drainage.
E. intraperitoneal exploration of bladder, repair of laceration, and catheter drainage.

96. A recurrent calcium oxalate stone former has a urinary calcium of 298 mg/24 hr (normal < 250 mg/24 hr). He is interested in alternatives to traditional medical therapy. The next step is to recommend:

A. fish oil.
B. pyridoxine.
C. cranberry.
D. Echinacea.
E. Vitamin E.

97. In a patient whose external genitalia are shown, the arrows denote the urethral meatus. The embryologic origin of the structure that may cause difficulty with catheterization is:

A. Müllerian duct.
B. mesonephric duct.
C. urorectal septum.
D. urogenital sinus.
E. urethral plate.



98. A 48-year-old woman has an incidentally discovered 3 cm right adrenal mass on ultrasound. The next step is:

A. non-contrast CT scan.
B. contrast CT scan washout study.
C. gadolinium-enhanced MRI scan washout study.
D. ^{18}F-dopamine PET scan.
E. ^{131}I-MIBG radionucleotide imaging.

99. A ten-year-old boy has microscopic hematuria after treatment of a febrile upper respiratory infection. Repeat urinalyses, two weeks and three months later, are normal except for 5-8 RBC/hpf. His serum creatinine is 0.6 mg/dL, and a renal ultrasound is normal. A fasting spot urine calcium:creatinine ratio is elevated. The next step is:

A. cystoscopy.
B. C3 and ASO titers.
C. non-contrast CT scan.
D. 24-hour urine calcium.
E. renal biopsy.

100. A 75-year-old man with a prior history of a left radical nephrectomy develops intractable hypertension and has a right renal artery ostial stenosis of > 75%. His volume status and angiotensin II levels are best characterized, respectively, as:

A. euvolemic, normal.
B. euvolemic, elevated.
C. hypervolemic, suppressed.
D. hypervolemic, normal.
E. hypervolemic, elevated.

101. An 11-month-old boy has a right testicular mass. AFP is 50 IU/mL and hCG is normal. Abdominal-pelvic CT scan is normal. During inguinal exploration, frozen section biopsy reveals teratoma. The next step is:

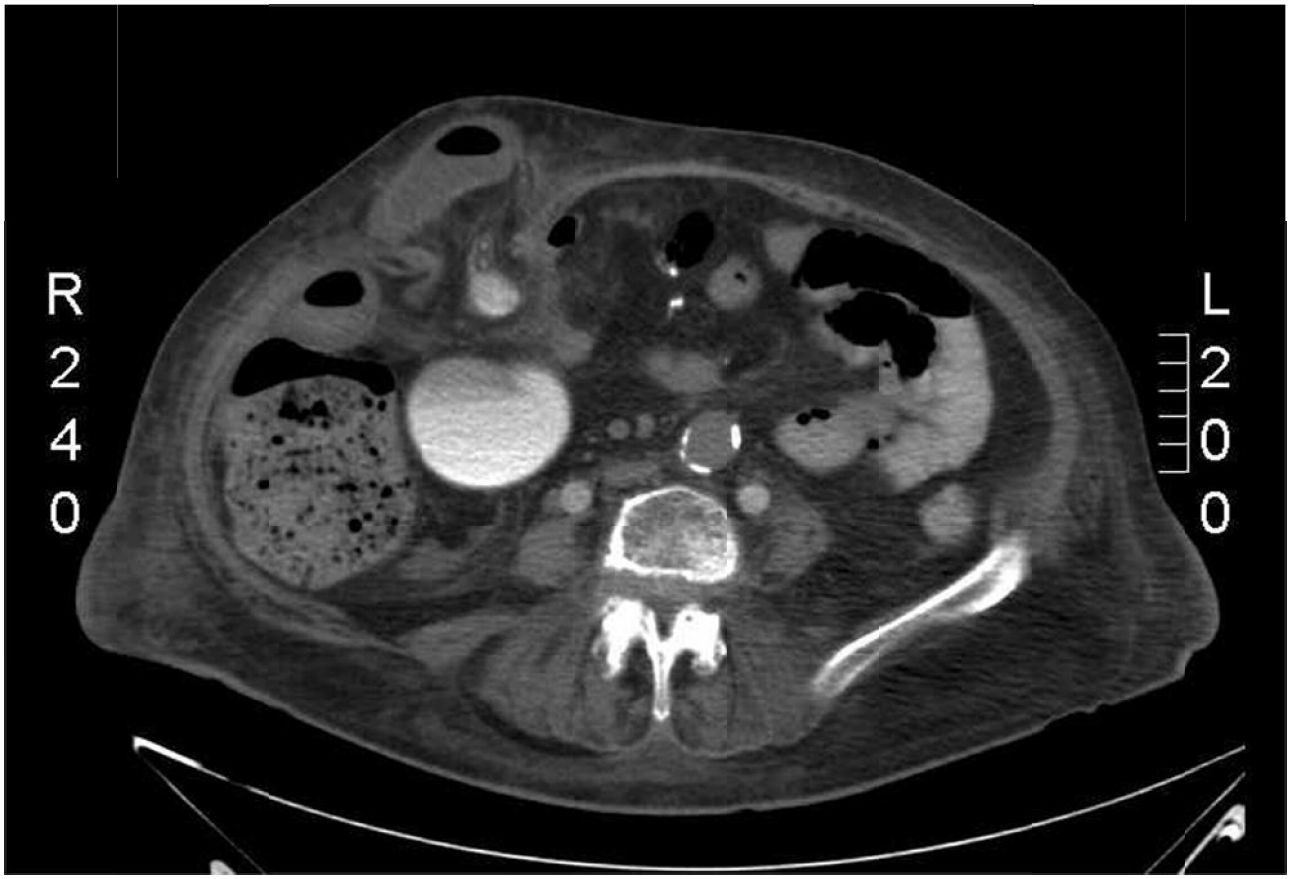
A. partial orchiectomy.
B. partial orchiectomy and serial scrotal ultrasounds.
C. orchiectomy.
D. orchiectomy and adjuvant chemotherapy.
E. orchiectomy and RPLND.

102. A four-year-old girl is febrile with left upper pole hydroureteronephrosis and a debris-filled ectopic ureterocele. In addition to broad-spectrum I.V. antibiotics, the next step is:

A. percutaneous nephrostomy.
B. cystoscopy and ureteral stent.
C. cystoscopy and ureterocele incision.
D. open excision of ureterocele.
E. open excision of ureterocele and ipsilateral ureteral reimplant.

103. An 80-year-old woman has vague abdominal pain and no urine output for 12 hours. She underwent cystectomy and ileal conduit urinary diversion for urothelial carcinoma three years ago. Serum creatinine is normal and CT loopogram images are shown. The diagnosis is:

A. stomal stenosis.
B. intestinal stricture due to lymphoid depletion.
C. parastomal hernia.
D. stomal prolapse.
E. intestinal volvulus.



104. A 45-year-old man amputates his penis at the level of the proximal shaft. In addition to the repair of the urethra, the following structures should be anastomosed:

A. dorsal arteries, deep dorsal ' 'orsal nerves.
B. cavernosal arteries and dorsal nerves.
C. cavernosal arteries, dorsal arteries, deep dorsal vein, and dorsal nerves.
D. cavernosal arteries, dorsal arteries, and deep dorsal vein.
E. dorsal arteries and dorsal nerves.

105. A 68-year-old man undergoes a partial penectomy for a high-grade pT2 squamous cell carcinoma of the distal urethra. The margins are negative and the metastatic work-up is negative. The next step is:

A. observation.
B. adjuvant chemotherapy.
C. bilateral superficial inguinal lymphadenectomy.
D. bilateral pelvic and inguinal lymphadenectomy.
E. total penectomy.

106. A 76-year-old woman has hypertension, type 2 diabetes, and mild chronic renal insufficiency associated with proteinuria. The best reno-protective strategy includes initiation of:

A. amlodipine.
B. atenolol.
C. clonidine.
D. lisinopril.
E. hydrochlorothiazide.

107. Clostridium difficile infections with severe dehydration and electrolyte imbalance without abdominal distension or ileus are best treated with:

A. oral metronidazole.
B. oral vancomycin.
C. oral vancomycin and I.V. metronidazole.
D. I.V. metronidazole and rectal vancomycin.
E. I.V. vancomycin and rectal metronidazole.

108. A patient complains of stress urinary incontinence one year following radical prostatectomy. Physical evaluation confirms stress incontinence. However, videourodynamic studies fail to document stress incontinence with Valsalva maneuvers at 150 mL, 250 mL, and end-fill capacity of 500 mL with the patient reaching Valsalva intra-abdominal pressures of > 60 cm H_2O. The next step in the videourodynamic test is:

A. instill more volume.
B. remove the urethral catheter and repeat the Valsalva maneuver.
C. perform straining, tapping and Crede maneuvers to attempt to elicit involuntary bladder contractions.
D. increase Valsalva efforts to attempt to obtain pressures of > 100 cm H_2O pressure.
E. have patient void and check postvoid residual urine.

109. A 67-year-old woman is on active surveillance for a 3 cm renal mass. Initial percutaneous biopsy demonstrated oncocytoma. Her first follow-up imaging at three months shows no change. The next step is annual history, physical exam, and:

A. observation.
B. repeat biopsy at one year.
C. annual abdominal imaging (ultrasound or CT or MRI scan).
D. annual abdominal imaging (ultrasound or CT or MRI scan) and chest X-ray.
E. repeat biopsy at one year and annual abdominal imaging (ultrasound or CT or MRI scan).

110. A 16-year-old girl with spina bifida and a ventriculoperitoneal shunt has abdominal pain, fever, nausea, and vomiting. She has a prior augmentation cystoplasty, Mitrofanoff channel, and bladder neck ligation. A conventional cystogram is normal. A catheter is placed, and I.V. antibiotics are initiated. The next step is:

A. observation.
B. abdominal ultrasound.
C. CT cystogram.
D. endoscopy of the augmented bladder.
E. shunt series.

111. A 65-year-old woman has bothersome frequency, urgency, and nocturia one month after autologous fascial sling. Her postvoid residual is 300 mL, and urinalysis is negative. The next step is:

A. alpha-blocker.
B. urethral dilation.
C. CIC.
D. sling loosening.
E. sling incision.

112. An icteric, one-week-old boy has a right upper quadrant mass and scrotal ecchymosis. Ultrasound shows a complex, right suprarenal mass with internal echoes. Labs demonstrate anemia and normal plasma catecholamine levels. The next step is:

A. repeat ultrasound in two weeks.
B. needle biopsy of the mass.
C. ultrasound-guided percutaneous drainage.
D. bone marrow aspiration.
E. adrenalectomy.

113. A 33-year-old man with erectile dysfunction has a testosterone of 179 ng/dL. He takes chronic opioids for back pain. His wife is pregnant with their first child, and they would like to have more children. The next step is:

A. wean opioids.
B. testosterone gel.
C. testosterone injection.
D. urethral alprostadil suppositories.
E. sex therapy.

114. A 52-year-old man has new onset, bright red blood in his nephrostomy tube three days after right PCNL. He is hemodynamically stable; however, his hemoglobin has decreased from 13 mg/dL to 10 mg/dL. CT scan reveals a right perinephric hematoma. The next step is:

A. bed rest and serial hemoglobin levels.
B. nephrostomy tamponade catheter.
C. inject fibrin glue.
D. nephroscopy and fulguration.
E. selective angioembolization.

115. A 28-year-old, healthy woman has dysuria and frequency. Examination shows suprapubic tenderness and urinalysis reveals pyuria. Her pregnancy test is negative. The next step is:

A. urine culture.
B. single dose of trimethoprim/sulfamethoxazole.
C. single dose of ciprofloxacin.
D. three day course of trimethoprim/sulfamethoxazole.
E. three day course of ciprofloxacin.

116. After two weeks of behavioral therapy and oxybutynin, a 64-year-old woman continues to report frequency and urge incontinence. She has minimal side effects from the medication, and her urinalysis is normal. The next step is:

A. continue present therapy.
B. stop oxybutynin, start solifenacin.
C. add mirabegron.
D. cystoscopy.
E. intravesical onabotulinumtoxinA injections.

117. The best initial therapy for post-prostate biopsy sepsis is:

A. ciprofloxacin.
B. gentamicin.
C. imipenem.
D. piperacillin/tazobactam.
E. trimethoprim/sulfamethoxazole.

118. A six-year-old girl has low volume urinary incontinence and two documented afebrile UTIs. Timed voiding and treatment of constipation have only helped modestly with incontinence, and she had a third afebrile UTI. Uroflowmetry with EMG shows a voided volume of 180 mL with a low plateau-shaped curve and increased pelvic floor activity at the time of voiding. PVR is 50 mL. The next step is:

A. biofeedback.
B. antimuscarinics.
C. VCUG.
D. CIC.
E. onabotulinumtoxinA injection in the external sphincter.

119. As compared to conventional laparoscopic radical nephrectomy, hand-assisted nephrectomy is associated with:

A. prolonged ileus.
B. prolonged hospitalization.
C. increased wound complications.
D. increased narcotic requirements.
E. increased port site metastases.

120. An 81-year-old man has muscle-invasive urothelial carcinoma of the bladder with multifocal CIS. Metastatic evaluation is negative. GFR is 48 mL/min/1.7 m^2. The next step is:

A. chemoradiation therapy.
B. cisplatin-based chemotherapy followed by radical cystectomy.
C. carboplatin-based chemotherapy followed by radical cystectomy.
D. radical cystectomy.
E. radical cystectomy followed by adjuvant chemotherapy.

121. A recurrent calcium oxalate stone former has a urine calcium excretion of 180 mg/day (normal < 200 mg/day) and a uric acid excretion of 950 mg/day (normal < 800 mg/day). The next step is:

A. allopurinol.
B. chlorthalidone.
C. hydrochlorothiazide.
D. potassium citrate.
E. triamterene.

122. A 65-year-old man with metastatic clear cell RCC demonstrates progression after initial treatment with sunitinib therapy. His performance status is good. Level 1 evidence supports the use of:

A. bevacizumab.
B. sorafenib.
C. pazopanib.
D. temsirolimus.
E. everolimus.

123. Fifty boys were equally randomized to urethral stent or no urethral stent following hypospadias repair. Ten boys in the stented group and four boys in the non-stented group reported bladder spasm pain. The best test to determine if there was a significant difference regarding bladder spasm relative to stent status is:

A. Fisher's exact test.
B. Chi-square test.
C. analysis of variance (ANOVA).
D. logistic regression.
E. Pearson correlation coefficient.

124. A 66-year-old man with advanced prostate cancer is starting abiraterone therapy. The addition of prednisone is necessary in order to:

A. decrease inflammatory response and pain.
B. reduce nausea and anorexia.
C. minimize side effects of binding to CYP17.
D. inhibit the nuclear translocation of the androgen receptor.
E. decrease microtubule assembly.

125. The human papillomavirus (HPV) vaccine:

A. is effective if the individual has been previously exposed to HPV.
B. should be administered before the onset of sexual activity.
C. is FDA-approved for females only.
D. may cause a mild, transient HPV-like outbreak.
E. is effective against all known HPV subtypes.

126. A 55-year-old man has lower extremity thrombophlebitis and is started on warfarin. Two weeks later, he experiences abdominal pain and has a blood pressure of 84/50 mmHg. His hemoglobin is 13.5 gm/dL and serum potassium is 5.8 mEq/L. A CT scan demonstrates bilateral adrenal hemorrhage. The next step is I.V. fluids and administration of:

A. dexamethasone.
B. fresh frozen plasma.
C. Kayexalate®.
D. fluorohydrocortisone.
E. Vitamin K.

127. A 28-year-old man with NSGCT has a serum AFP of 2,500 IU/mL, small volume retroperitoneal nodes, and liver metastases. The best choice of chemotherapy is:

A. three cycles of BEP.
B. four cycles of EP.
C. four cycles of BEP.
D. four cycles of vinblastine, ifosfamide, and cisplatin (VIP).
E. high dose chemotherapy and bone marrow transplant.

128. A 68-year-old man with obesity, diabetes mellitus, and dialysis-dependent renal failure has painful abdominal skin lesions and a 2 cm painful eschar on the scrotum. The next step is:

A. observation.
B. corticosteroids.
C. amphotericin B.
D. biopsy.
E. surgical debridement.

129. A 19-year-old man has pulmonary function tests showing decreased diffusion capacity for carbon monoxide (DLCO), with a CT scan showing diffuse areas of ground-glass opacity after his second cycle of BEP chemotherapy. Prior to his next cycle of chemotherapy, the next step is to:

A. discontinue bleomycin.
B. repeat pulmonary function tests.
C. administer prophylactic hydrocortisone.
D. administer granulocyte colony stimulating factor.
E. change to vinblastine, ifosfamide, and cisplatin (VIP) chemotherapy.

130. A 17-year-old boy with cystinuria has a unilateral staghorn calculus. The next step is PCNL and:

A. D-penicillamine.
B. potassium citrate.
C. hydration with 1.5 L intake daily.
D. acetohydroxamic acid.
E. Renacidin® irrigation.

131. A 16-year-old boy with history of spina bifida and hydrocephalus status post back closure and ventricular-peritoneal shunt placement as a neonate, has sudden onset of nausea, vomiting, and lower abdominal pain four months after bladder augmentation. A catheterized urine specimen shows 3-5 WBC/hpf with moderate bacteria and a catheterized urine volume of 120 mL. His temperature 38.0° C, and his vital signs are normal. Physical examination reveals diffuse abdominal tenderness. The next step is:

A. I.V. antibiotics.
B. abdominal and pelvic ultrasound.
C. CT cystogram.
D. cystoscopy.
E. exploratory laparotomy.

132. A 14-year-old girl has recurrent uric acid stones. Her pediatrician has increased her fluid intake, limited dietary animal protein, and started allopurinol 50 mg/day. Urine pH is 5.5. The next step is:

A. increase allopurinol to 150 mg/day.
B. alpha-mercapotopropionylglycine.
C. limit sodium intake to < 2.3 gm/day.
D. potassium citrate.
E. increase intake of fruits and vegetables.

133. The event that initiates detumescence following a normal erection is:

A. a transient rise in intracorporal pressure.
B. a slow decrease in intracorporal pressure.
C. a rapid decrease in intracorporal pressure.
D. cavernosal smooth muscle relaxation.
E. endothelial relaxation.

134. A six-year-old boy who had a right pyeloplasty in infancy for a UPJ obstruction now has right flank pain and vomiting. An ultrasound performed six months ago demonstrated minimal hydronephrosis. Current imaging shows moderate right hydronephrosis with a 7 mm calculus at the UPJ. The next step is:

A. tamsulosin.
B. SWL.
C. ureteroscopic laser lithotripsy.
D. PCNL.
E. revision pyeloplasty and nephrolithotomy.

135. In a morbidly obese man with erectile dysfunction, the serum androgen profile is most likely to show:

A. ↓ total testosterone, ↓ estradiol, and ↓ serum hormone-binding globulin.
B. ↓ total testosterone, ↓ estradiol, and ↑ serum hormone-binding globulin.
C. ↓ total testosterone, ↑ estradiol, and ↓ serum hormone-binding globulin.
D. ↑ total testosterone, ↓ estradiol, and ↑ serum hormone-binding globulin.
E. ↑ total testosterone, ↑ estradiol, and ↓ serum hormone-binding globulin.

136. After successful pneumoperitoneum is achieved with a Veress needle, a 12 mm trocar is inserted above the umbilicus along the mid-line without laparoscopic assistance. Upon removal of the obturator, brisk, pulsatile blood is seen emanating from the trocar associated with abrupt tachycardia and hypotension to 85/60 mmHg. The next step is to fluid resuscitate, call for a vascular surgeon, and:

A. increase insufflation pressure.
B. close trocar valve, maintain its position, and perform exploratory laparotomy.
C. remove trocar and perform exploratory laparotomy.
D. place additional trocar to assess injury.
E. place hand-assist port and repair injury laparoscopically.

137. A 62-year-old man had eight intralesional collagenase injections for a 60 degree dorsal penile curvature one year ago. He now has a 25 degree dorsal penile curvature and moderate erectile dysfunction unresponsive to PDE-5 inhibitor, and wants further treatment. The next step is:

A. reassurance.
B. eight additional intralesional collagenase injections.
C. eight intralesional verapamil injections.
D. penile plication.
E. insertion of penile prosthesis.

138. Two weeks after undergoing a transobturator mid-urethral sling, a 45-year-old female, long distance runner complains of severe groin pain radiating to both inner thighs. Urinalysis is normal and PVR is 10 mL. Narcotics and anti-inflammatory medications are not helpful. The next step is:

A. observation.
B. refer to pain management.
C. refer to physical therapy.
D. urethrolysis.
E. sling removal and retropubic sling.

139. Two years after a low anterior resection with pelvic X-ray and chemotherapy for advanced colon cancer, a 69-year-old man develops fecaluria and pneumaturia. Cystoscopy shows an irregular area in the posterior bladder wall. The next step is:

A. fulguration.
B. biopsy.
C. partial cystectomy.
D. colon resection and bladder repair with omental interposition.
E. pelvic exenteration.

140. A 24-year-old man, with a gunshot wound shattering the L-4 vertebral body, achieves stable neurogenic bladder dysfunction nine months later. Pressure flow urodynamic studies will likely show:

A. detrusor overactivity, sphincter dyssynergia.
B. detrusor overactivity, normal sphincter EMG.
C. detrusor areflexia, sphincter dyssynergia.
D. detrusor areflexia, normal sphincter EMG.
E. detrusor areflexia, denervation potentials on EMG.

141. A 42-year-old man has a three month history of a 60 degree dorsal penile curvature and significant penile pain with erections. The best treatment is:

A. ibuprofen.
B. Vitamin E.
C. pentoxifylline.
D. penile stretching device.
E. intralesional collagenase injections.

142. While performing a right, robotic, partial nephrectomy and during an exchange of a robotic instrument by the bedside assistant, the new instrument is inadvertently advanced into the liver. The most likely cause of this injury is due to:

A. dislodgement of instrument faceplate.
B. forceful insertion of the instrument.
C. lack of visualization of instrument tip during advancement.
D. accidental activation of instrument arm clutch button.
E. defective instrument.

143. A 60-year-old, hypertensive man is well-controlled on a beta-blocker. CT angiography obtained for evaluation of a 3 cm, infrarenal, abdominal, aortic aneurysm incidentally reveals a 50% ostial stenosis of the left renal artery. Doppler ultrasound of the renal arteries, plasma renin, and serum creatinine are normal. The next step is:

A. serial blood pressure and renal clearance evaluations.
B. repeat CT angiogram and Doppler ultrasound of the renal arteries in one year.
C. split differential renal vein renin sampling.
D. percutaneous transluminal angioplasty.
E. percutaneous transluminal angioplasty with stent placement.

144. Angiotensin II maintains GFR during conditions of hypovolemia by causing:

A. afferent arteriolar vasodilation.
B. efferent arteriolar vasoconstriction.
C. increased renal medullary blood flow.
D. renal artery dilation.
E. passive sodium absorption.

145. A 14-month-old boy has a urethrocutaneous fistula following a hypospadias repair. The most important step for successful fistula repair is:

A. intra-operative urethral calibration.
B. use of fine absorbable sutures.
C. post-operative drip stent or catheter.
D. multi-layer closure.
E. vascularized interposition flap.

146. A 52-year-old commercial airline pilot has asymptomatic microhematuria on a screening medical exam. CT scan demonstrates multiple bilateral renal calculi, all less than 5 mm. The next step is cystoscopy and:

A. observation.
B. medical expulsive therapy.
C. potassium citrate.
D. SWL.
E. ureteroscopy.

147. A 60-year-old man is scheduled for a retroperitoneal laparoscopic radical nephrectomy. Following balloon dilation of the retroperitoneal space, a standard 12 mm trocar is inserted and secured to the fascia. During the operation, he develops subcutaneous crepitus and the end tidal CO_2 gradually climbs. The most likely cause is:

A. occult pulmonary bleb disease.
B. dislodgement of the trocar.
C. gas leakage around the trocar and fascia.
D. accidental entry into the peritoneal cavity.
E. entry into a venous sinus.

148. A 44-year-old man is scheduled to undergo renal transplantation. Pre-operatively, he has a 1.2 cm left pelvic stone in his native kidney. The next step is:

A. SWL.
B. ureteroscopy with laser lithotripsy.
C. PCNL.
D. left nephrectomy of native kidney.
E. proceed with renal transplantation.

149. A 20-year-old, healthy woman with no prior surgical history has lower abdominal pain and no urge to urinate for 36 hours. A catheter is placed with a return of 1300 mL. Neurologic evaluation is unremarkable. The urodynamic finding most likely to suggest the definitive diagnosis is:

A. impaired compliance.
B. low amplitude detrusor contractions.
C. high voiding pressure, low flow.
D. abnormal firing on electromyography.
E. detrusor external sphincter dyssynergia.

150. A 64-year-old, healthy man with back pain undergoes prostate biopsy for a PSA of 126 ng/mL. The biopsy reveals Gleason 8 (4+4) prostate cancer. Bone scan reveals multiple lesions in his lumbar spine, ribs, and right scapula. CT imaging reveals pelvic and retroperitoneal adenopathy. The next step is androgen deprivation therapy and:

A. ketoconazole.
B. sipuleucel-T.
C. enzalutamide.
D. abiraterone.
E. docetaxel.

