1. Transcatheter arterial embolization is an acceptable alternative to pretransplant native nephrectomy for patients with:

   A. Goodpasture syndrome.
   B. severe proteinuria.
   C. VUR.
   D. symptomatic polycystic kidneys.
   E. a history of pyelonephritis.

2. A 45-year-old hypertensive man with a family history of renal failure is noted to have bilaterally enlarged cystic kidneys, and hepatic and pancreatic cysts during an abdominal ultrasonographic examination for abdominal/flank pain and fever. He also complains of marked dysuria. He is admitted with a presumptive diagnosis of pyelonephritis. Urine culture has been sent. Initial antibiotic should be:

   A. gentamicin.
   B. ampicillin.
   C. cephalexin.
   D. ciprofloxacin.
   E. nitrofurantoin.

3. A 48-year-old man undergoes radical cystectomy with a Studer-type orthotopic urinary diversion. Three months postoperatively, he complains of frequency and day and nighttime incontinence. Videourodynamics reveal capacity of 300 ml, detrusor pressure at capacity is 10 cm H_20, Valsalva LPP is 130 cm H_20, and PVR is 75 ml. The next step is:

   A. observation.
   B. alpha-blocker therapy.
   C. CIC every two to three hours.
   D. placement of an artificial urinary sphincter.
   E. augmentation of his orthotopic diversion.

4. In central (pituitary) diabetes insipidus, the nephron segment that contains the most dilute fluid is the:

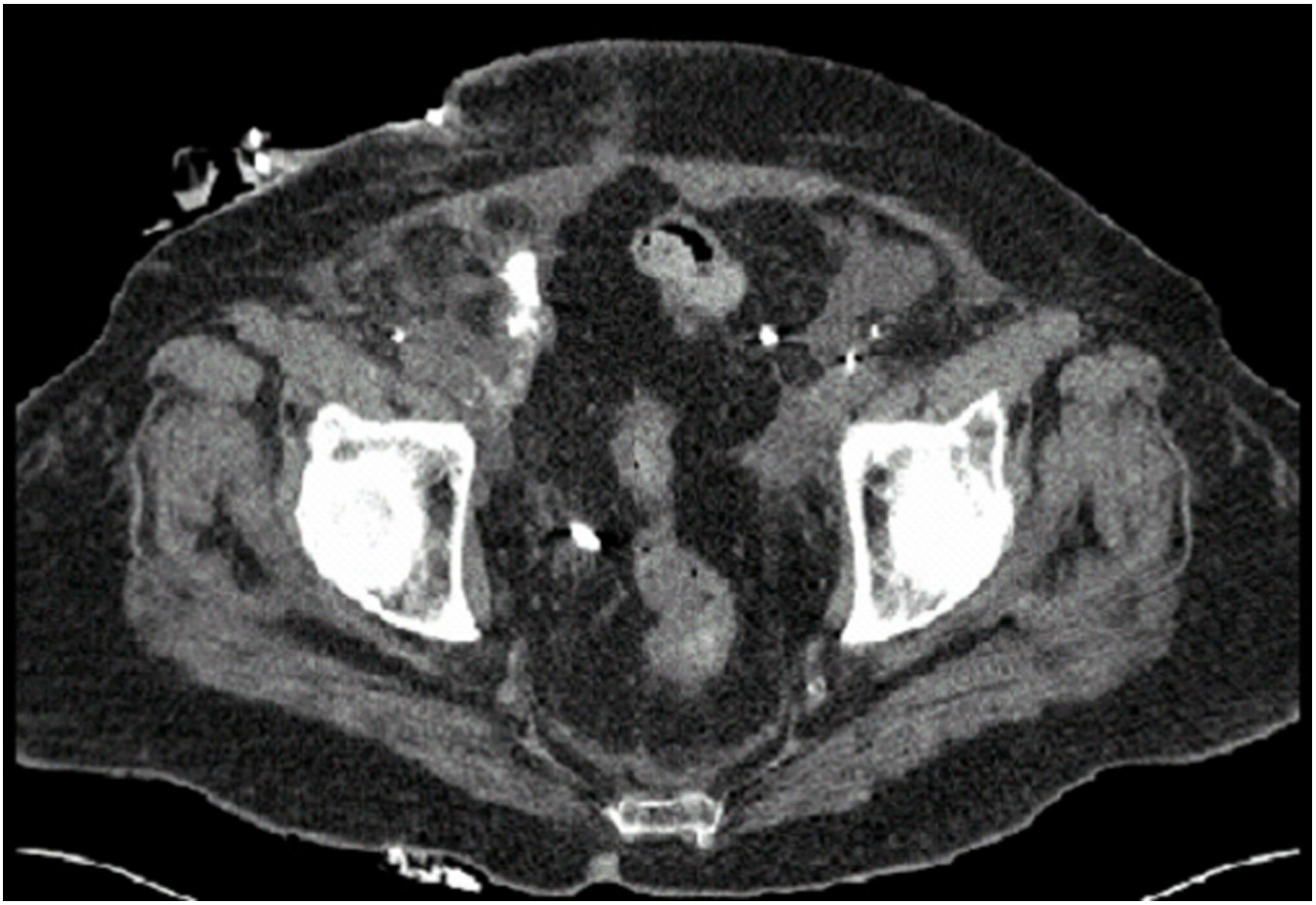
   A. proximal convoluted tubule.
   B. descending limb of Henle's loop.
   C. ascending limb of Henle's loop.
   D. distal convoluted tubule.
   E. collecting duct.

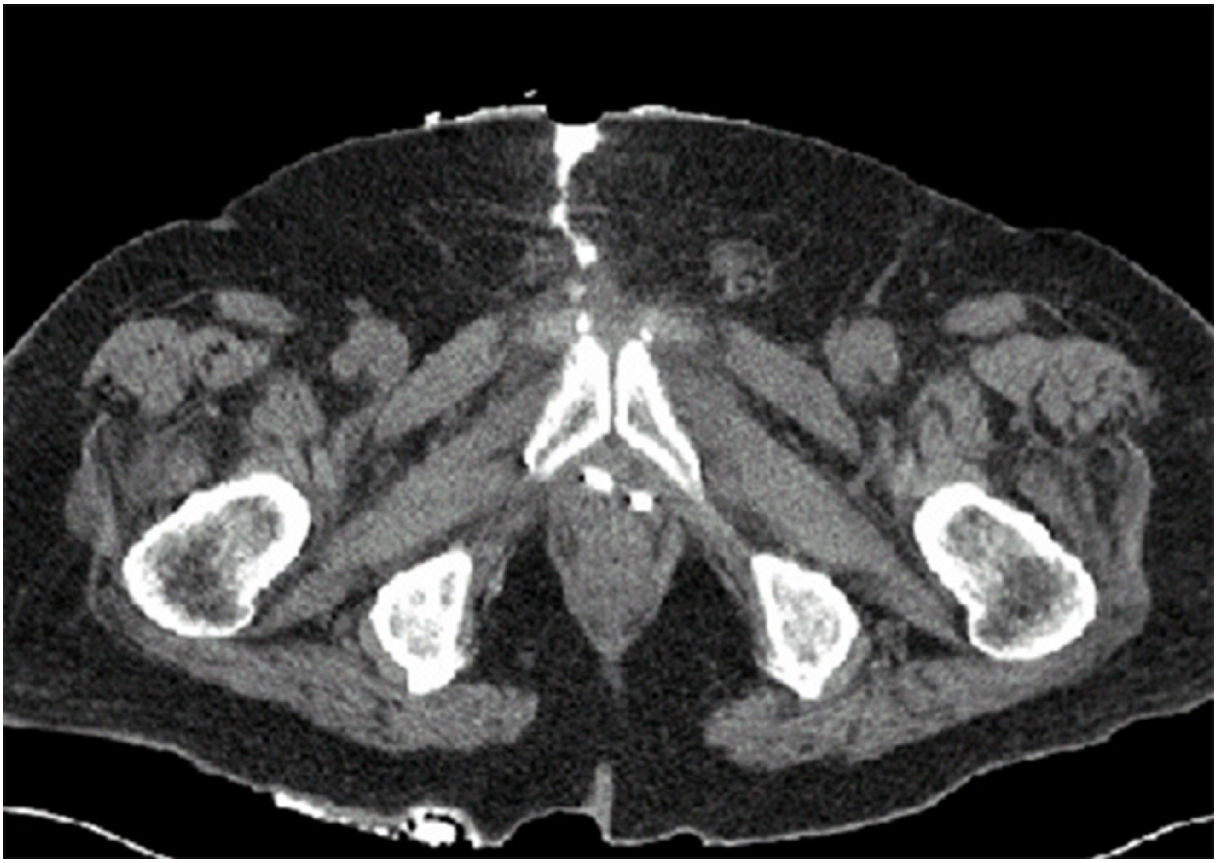
5. During PCNL, a collecting system perforation is noted. The first sign of significant extravasation of irrigant into the peritoneal cavity is:

   A. hypotension.
   B. hypercarbia.
   C. abdominal distension.
   D. narrowed pulse pressures.
   E. increasing ventilatory pressures.

6. A 77-year-old man has a retracted stoma and clear fluid leaking from his midline incision three weeks after radical cystectomy and ileal conduit diversion. Three images from a CT loopogram are shown. The next step is percutaneous pelvic drainage and:

A. stomal catheter.
B. loop endoscopy, fulguration.
C. fascial repair.
D. stomal revision.
E. exploration, repair of leak.





7. A 27-year-old man states that since a radical orchiectomy for stage A seminoma six months previously, the frequency and quality of his erections have been poor. He received XRT to periaortic nodes. The last treatment was two months after the orchiectomy. His chest x-ray, serum markers, glucose, and testosterone are normal. The next step is:

A. intracavernosal injection therapy.
B. sexual dysfunction counseling.
C. intraurethral alprostadil.
D. nocturnal penile tumescence studies.
E. testosterone patch.

8. Sepsis after PCNL best correlates with:

A. preoperative urine culture.
B. stone culture.
C. length of procedure.
D. blood loss.
E. collecting system violation.

9. A 56-year-old man undergoes partial penectomy for pT2 squamous cell carcinoma. Examination reveals no inguinal adenopathy. The primary tumor characteristic most predictive of pathologic lymph node involvement is:

A. HPV status.
B. tumor thickness > 5 mm.
C. lymphovascular invasion.
D. corpora spongiosum involvement.
E. corpora cavernosal involvement.

10. Impaired ammonia production by the kidney will most likely result in:

A. calcium oxalate renal lithiasis.
B. decreased urine titratable acidity.
C. impaired urea excretion.
D. systemic alkalosis.
E. metastatic calcification.

11. The condition associated with uric acid stone formation is:

A. insulin resistance.
B. thiazide therapy.
C. hyperthyroidism.
D. immobilization.
E. proximal RTA.

12. During radical cystectomy, the cephalad (proximal) limit of an extended pelvic lymph node dissection is the:

A. aortic bifurcation.
B. inferior mesenteric artery.
C. bifurcation of the common iliac artery.
D. the genitofemoral nerve.
E. the circumflex iliac vein.

13. A 38-year-old woman develops incontinence ten days after an abdominal hysterectomy and anterior colporrhaphy for a large cystocele. She complains of leakage that is constant, but increases with an increase in abdominal pressure. The most likely diagnosis is:

A. overflow incontinence.
B. transient detrusor overactivity.
C. stress incontinence.
D. ureterovaginal fistula.
E. vesicovaginal fistula.

14. A 55-year-old diabetic woman has new onset pneumaturia. The next step is:

A. urinalysis and culture.
B. abdominal and pelvic CT scan.
C. cystogram.
D. barium enema.
E. cystoscopy.

15. A 65-year-old man develops lung and liver metastases four months after undergoing a left radical nephrectomy for clear cell carcinoma. Hemoglobin is 8.1 g/dl, Creatinine is 1.3 mg/dl, and his calcium is 13 mg/dl. The therapy most likely to improve survival is:

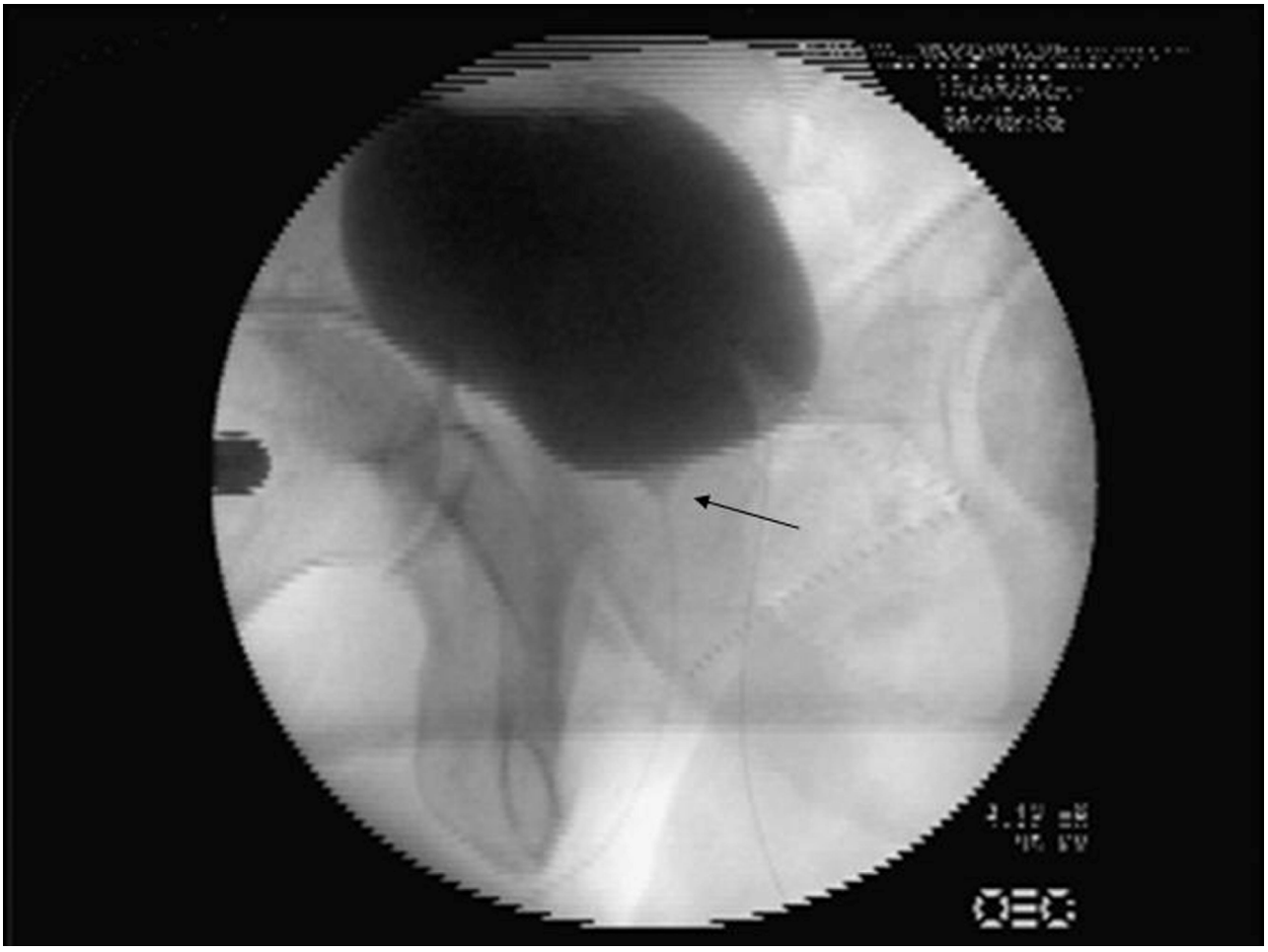
A. interferon-alpha.
B. interleukin 2.
C. temsirolimus.
D. sunitinib.
E. bevacizumab.

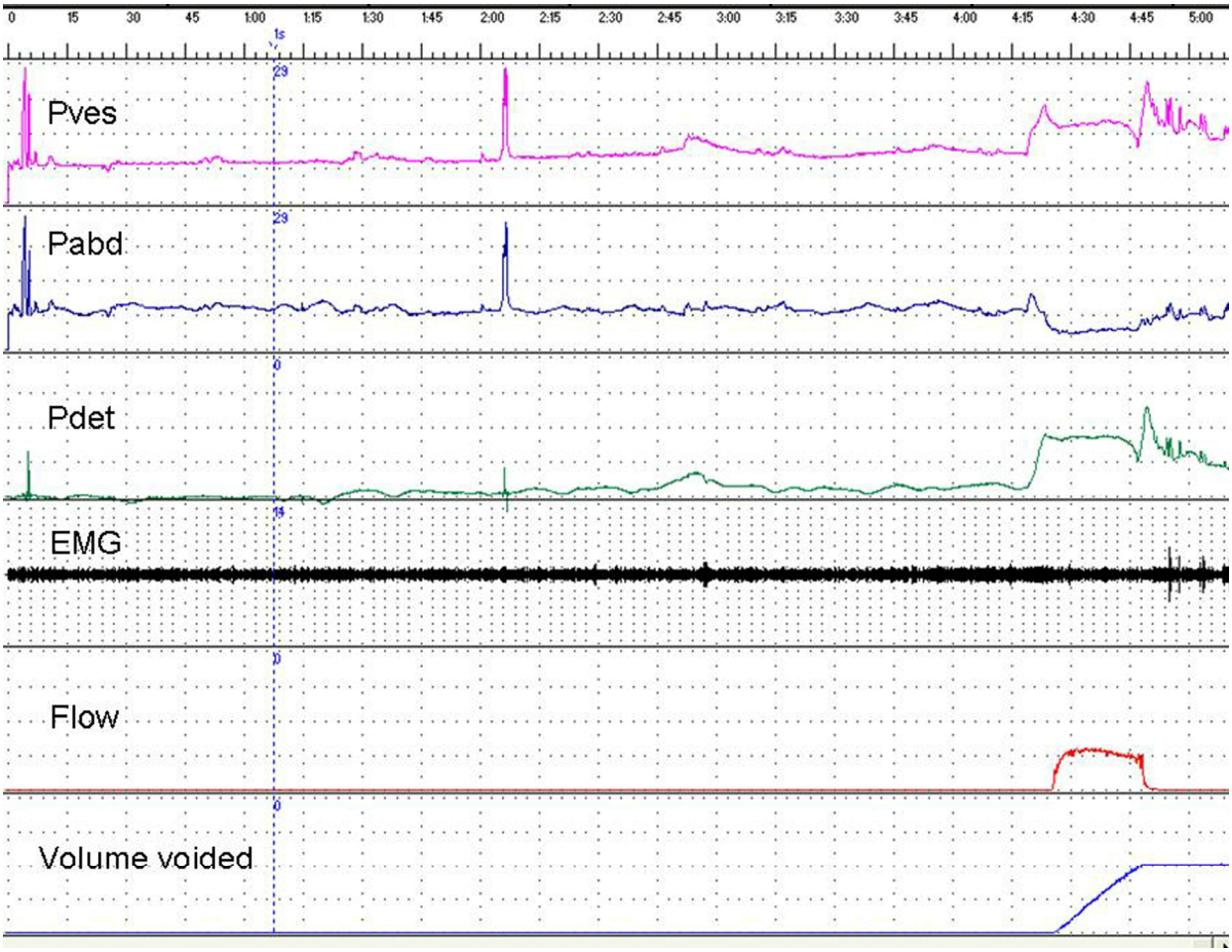
16. The most important factor for successful vesicovaginal fistula repair using an omental interposition graft is:

A. the length of the omentum.
B. adequate mobilization of the gastroepiploic vascular pedicle.
C. adequate mobilization of the omentum by splenectomy.
D. ligation of the short gastric vessels.
E. vaginal closure using non-absorbable suture material.

17. A 52-year-old man with erectile dysfunction undergoes videourodynamics for voiding dysfunction. A videourodynamic image, taken early in filling (at the point indicated by dotted line in the urodynamic tracing), is shown. The videourodynamics suggests a diagnosis of:

A. bladder neck dyssynergia.
B. cervical spinal stenosis.
C. Parkinson's disease.
D. Multiple System Atrophy (Shy-Drager).
E. multiple sclerosis.





18. When compared to age-matched controls, men treated with etoposide and platinum-based chemotherapy for NSGCT are at increased long term risk of:

A. systemic infection.
B. pulmonary fibrosis.
C. cardiovascular disease.
D. ototoxicity.
E. autoimmune disease.

19. Renal blood flow is autoregulated by:

A. sympathetic nerves.
B. GFR.
C. cardiac output.
D. parasympathetic nerves.
E. afferent glomerular arteriolar resistance.

20. In idiopathic calcium oxalate stone formers, Randall's plaques originate:

A. in the basement membranes of the thin loops of Henle.
B. within the renal collecting ducts.
C. in the renal interstitium.
D. on the urothelial surface of the papilla.
E. in the vasa recta.

21. A 55-year-old man had a negative TRUS guided 10-core prostate biopsy two years ago for a PSA of 5 ng/ml. Now his PSA is 7 ng/ml. The next step is:

A. endorectal MRI scan prior to biopsy.
B. 12-core biopsies.
C. 12-core biopsies including anterior apical horn biopsies.
D. 12-core biopsies including transition zone biopsies.
E. saturation biopsies with patient under anesthesia.

22. An asymptomatic, 65 kg man with a serum creatinine of 2.0 mg/dl is evaluated for recurrent renal calculi. A 24-hour urinary creatinine measurement is 0.5 gm. This finding is most consistent with:

A. an incomplete collection.
B. low protein diet.
C. hydrochlorothiazide therapy.
D. resolving renal insufficiency.
E. unilateral obstruction.

23. A pregnant woman has a ureteral calculus causing pain. She has failed observation and cannot tolerate a ureteral stent. The best definitive management is:

A. SWL.
B. ureteroscopy with EHL.
C. ureteroscopy with laser lithotripsy.
D. ureteroscopy with ultrasonic lithotripsy.
E. laparoscopic ureterolithotomy.

24. A 68-year-old man with advanced prostate cancer is to receive sipuleucel-T (PROVENGE®). Premedication should include acetaminophen and a(n):

A. antihistamine.
B. mineralocorticoid.
C. glucocorticoid.
D. benzodiazepine.
E. opioid.

25. Calcium reabsorption induced by parathyroid hormone and Vitamin D occurs primarily in the:

A. proximal convoluted tubule.
B. collecting duct.
C. thick ascending loop of Henle.
D. distal tubule.
E. proximal straight tubule.

26. A 48-year-old woman has abnormal retention of isotope in the left renal collecting system on a bone scan that was performed during staging for breast cancer. The next step to evaluate the left kidney is:

A. serial creatinine measurements.
B. diuretic renogram.
C. cystoscopy and retrograde pyelogram.
D. antegrade pyelogram.
E. renal ultrasound.

27. A 68-year-old man undergoes a partial penectomy for a 4 cm squamous cell carcinoma with lymphovascular invasion and involvement of the subepithelial connective tissue. Physical exam reveals a 1.5 cm fixed, right inguinal mass. CT scans of the abdomen and pelvis are normal. His pathologic tumor stage (p) and clinical lymph node stage (c) are:

A. pTa cN1.
B. pT1a cN1.
C. pT1b cN2.
D. pT1b cN3.
E. pT2 cN3.

28. A 70-year-old neurologically normal woman has random, large volume urinary incontinence. Medical history is significant for a hysterectomy 20 years ago. Urinalysis is normal and PVR is 40 ml. The urodynamic study shown does not reveal incontinence or definable abnormality. The most likely cause of her incontinence is:

A. overflow.
B. idiopathic detrusor overactivity.
C. detrusor overactivity with impaired contractility.
D. intrinsic sphincter deficiency.
E. vesicovaginal fistula.

29. The factor that promotes stone formation during pregnancy is:

A. increased parathyroid hormone levels.
B. absorptive hypercalciuria.
C. placental suppression of 1,25-dihydroxycholecalciferol.
D. decreased urinary glycosaminoglycans.
E. decreased urinary citrate levels.

30. A 75-year-old man underwent nephroureterectomy for pT3N0Mx ureteral cancer six weeks ago. He is now considered for adjuvant chemotherapy. He lives independently and maintains his own home; however, he cannot perform strenuous activity. He is out of bed most of the day. His ECOG (Eastern Cooperative Oncology Group) Performance Status is:

A. 0.
B. 1.
C. 2.
D. 3.
E. 4.

31. A 65-year-old man undergoes radical cystectomy and orthotopic neobladder urinary diversion for pT2b urothelial carcinoma of the bladder. A key maneuver for maintaining continence is:

A. maximizing the length of the neobladder.
B. minimizing the length of the urethra to prevent kinking.
C. placing an intraoperative urethral sling.
D. forming a funnel-shaped reservoir.
E. performing bilateral nerve-sparing surgery.

32. A 32-year-old man has recurrent calcium oxalate stone formation. Despite an oxalate restricted diet, his urinary oxalate is high. The next step is:

A. pyridoxine.
B. hydrochlorothiazide.
C. allopurinol.
D. alpha-mercaptoproprionyl glycine.
E. Vitamin B12.

33. A 68-year-old woman on recommended daily allowance (RDA) vitamins develops CIS of the bladder and is starting intravesical immunotherapy. In an effort to maximize tumor response rates and minimize side effects she should receive induction and subsequent maintenance therapy with BCG and:

A. discontinue vitamins.
B. continue RDA vitamins.
C. initiate mega dose vitamin supplements.
D. interferon, and RDA vitamins.
E. interferon, and mega dose vitamin supplements.

34. A 55-year-old multiparous woman has urge incontinence. Urinalysis is normal and physical examination demonstrates a Grade 3 cystocele. Urodynamics reveal a PVR of 100 ml, detrusor overactivity resulting in incontinence, and a detrusor pressure at maximum flow (8 ml/sec) of 50 cm H_2O. When the cystocele is reduced, no stress urinary incontinence can be elicited. The next step is:

A. antimuscarinic medication.
B. alpha-blocker therapy.
C. midurethral sling.
D. anterior colporrhaphy.
E. midurethral sling and anterior colporrhaphy.

35. A 72-year-old woman has had six symptomatic UTIs over the past year. These infections return shortly after antibiotic courses are concluded, and cultures have demonstrated significant colony counts of E. coli. Renal ultrasound is normal. The next step is:

A. ciprofloxacin prophylaxis.
B. nitrofurantoin prophylaxis.
C. oral low dose estrogen.
D. intravaginal estrogen.
E. lactobacillus.

36. A 69-year-old man with metastatic castrate resistant prostate cancer experiences symptomatic clinical progression following I.V. docetaxel and oral prednisone given every three weeks. In order to improve survival, the most appropriate next step is:

A. mitoxantrone.
B. sipuleucel-T.
C. docetaxel weekly.
D. cabazitaxel.
E. ketoconazole.

37. A 60-year-old man has renal insufficiency due to atherosclerotic renal artery disease. The most important prognostic factor for successful renal revascularization to preserve renal function is:

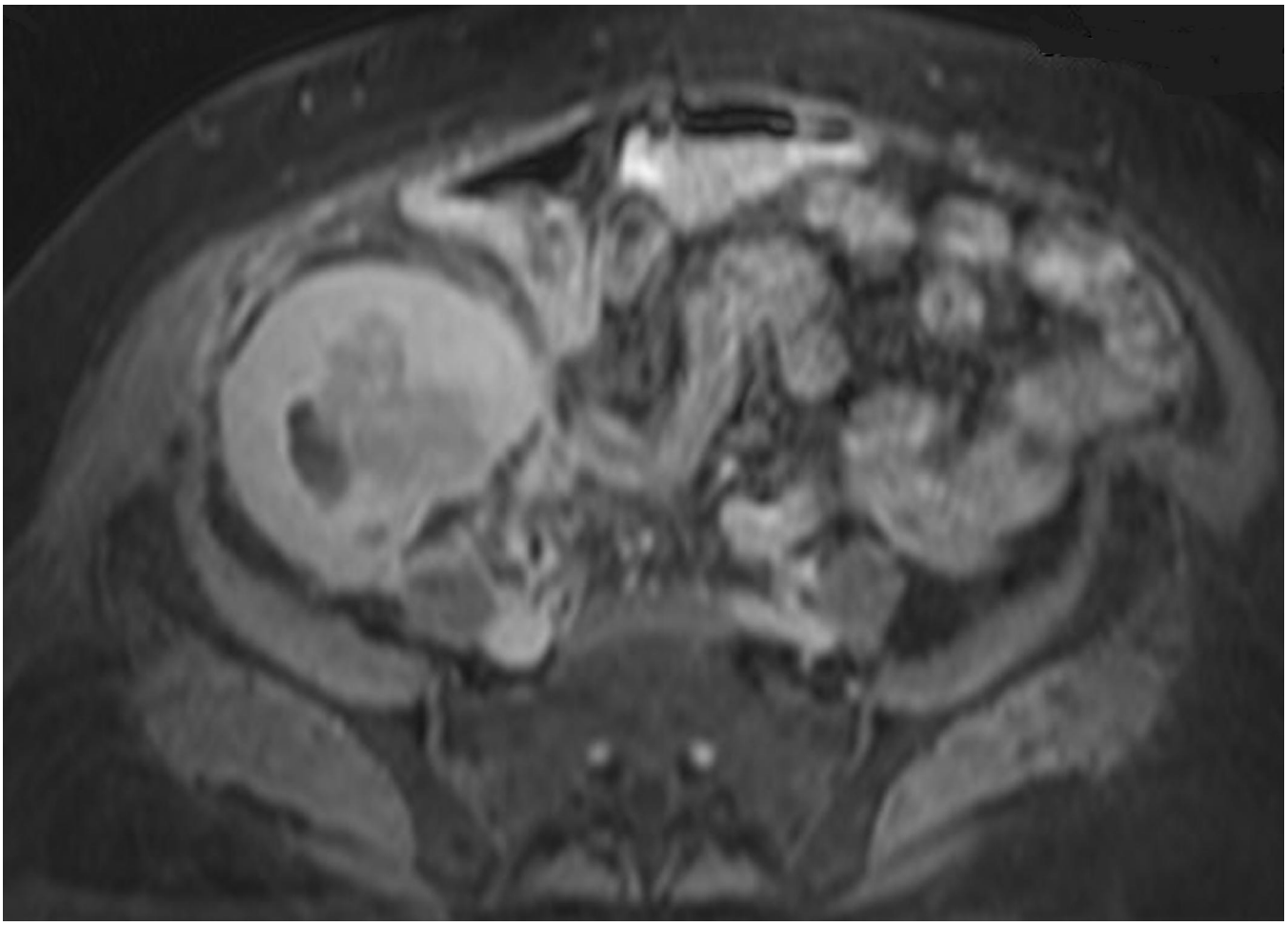
A. duration of hypertension.
B. proportion of sclerotic glomeruli on renal biopsy.
C. serum creatinine.
D. presence of collateral blood supply on angiography.
E. presence of renal artery occlusion.

38. The most accurate method to determine the length of a graft needed for repair of an anterior urethral stricture is:

A. urethroscopy.
B. ultrasound.
C. VCUG.
D. retrograde urethrogram.
E. CT imaging.

39. A 21-year-old woman develops hematuria and a mass in the allograft 18 months after renal transplant. Needle biopsy of the mass reveals an Epstein-Barr virus positive lymphoproliferative tumor. MRI scan is shown. The next step is:

A. reduce immunosuppression.
B. ganciclovir.
C. rituximab.
D. chemotherapy.
E. allograft nephrectomy.



40. A 35-year-old man with C5 quadriplegia has urinary incontinence managed by condom catheter drainage. Urodynamics reveal a detrusor LPP of 60 cm H_20 at 150 ml. The next step is:

A. observation.
B. CIC.
C. antimuscarinic medication.
D. external sphincterotomy.
E. male sling.

41. A 52-year-old woman has acute onset of right flank pain. She has a long-standing history of diarrhea secondary to laxative abuse. Urinalysis shows numerous RBCs and a pH 6.5. While in the emergency room she passes a small stone. The most likely stone composition is:

A. xanthine.
B. uric acid.
C. struvite.
D. ammonium acid urate.
E. calcium phosphate.

42. A 12-year-old boy undergoes a dismembered pyeloplasty with nephrostomy drainage for symptomatic UPJ obstruction. A nephrostogram performed two weeks later shows no drainage across the UPJ. The next step is:

A. repeat nephrostogram in two weeks.
B. MR urography.
C. antegrade renal perfusion study (Whitaker test).
D. convert the nephrostomy to a nephroureteral stent.
E. retrograde pyelography and ureteral stent placement.

43. A 62-year-old man with a serum creatinine of 4.7 mg/dl has persistent bleeding after TURP. The bleeding time is prolonged, but the PT, PTT, fibrinogen and platelet count are normal. The best treatment is:

A. aminocaproic acid.
B. Vitamin K.
C. fresh frozen plasma.
D. desmopressin.
E. platelet transfusion.

44. The most common cause of catheter-associated UTI is:

A. improper catheterization technique.
B. urethral meatal bacteria.
C. break in the drainage system.
D. urinary drainage bag bacteria.
E. bacterial antimicrobial resistance.

45. A one-year-old hypertensive boy has a large, fixed abdominal mass. The most likely diagnosis is:

A. congenital mesoblastic nephroma.
B. Wilms' tumor.
C. neuroblastoma.
D. pheochromocytoma.
E. autosomal recessive polycystic kidney disease.

46. A 25-year-old woman has headaches and shortness of breath. Her blood pressure is 160/110 mmHg and serum creatinine is 1.0 mg/dl. She has an abdominal bruit and microscopic hematuria. Renal angiography demonstrates a 6 cm cirsoid arteriovenous fistula and a normal contralateral kidney. The best management is:

A. angiotensin converting enzyme inhibitor.
B. beta-blocker.
C. fistula ligation.
D. angio-embolization.
E. nephrectomy.

47. A 75-year-old man with a history of peptic ulcer disease and gout has a newly-formed 2 cm radiopaque renal calculus, hypercalcemia, and an E. coli UTI. Chest x-ray reveals a 3 cm primary lung tumor. The most likely cause of his urolithiasis is:

A. absorptive hypercalciuria.
B. primary hyperparathyroidism.
C. ectopic hyperparathyroidism.
D. secondary hyperparathyroidism.
E. E. coli UTI.

48. Recurrent UTIs in school-age girls is most often influenced by:

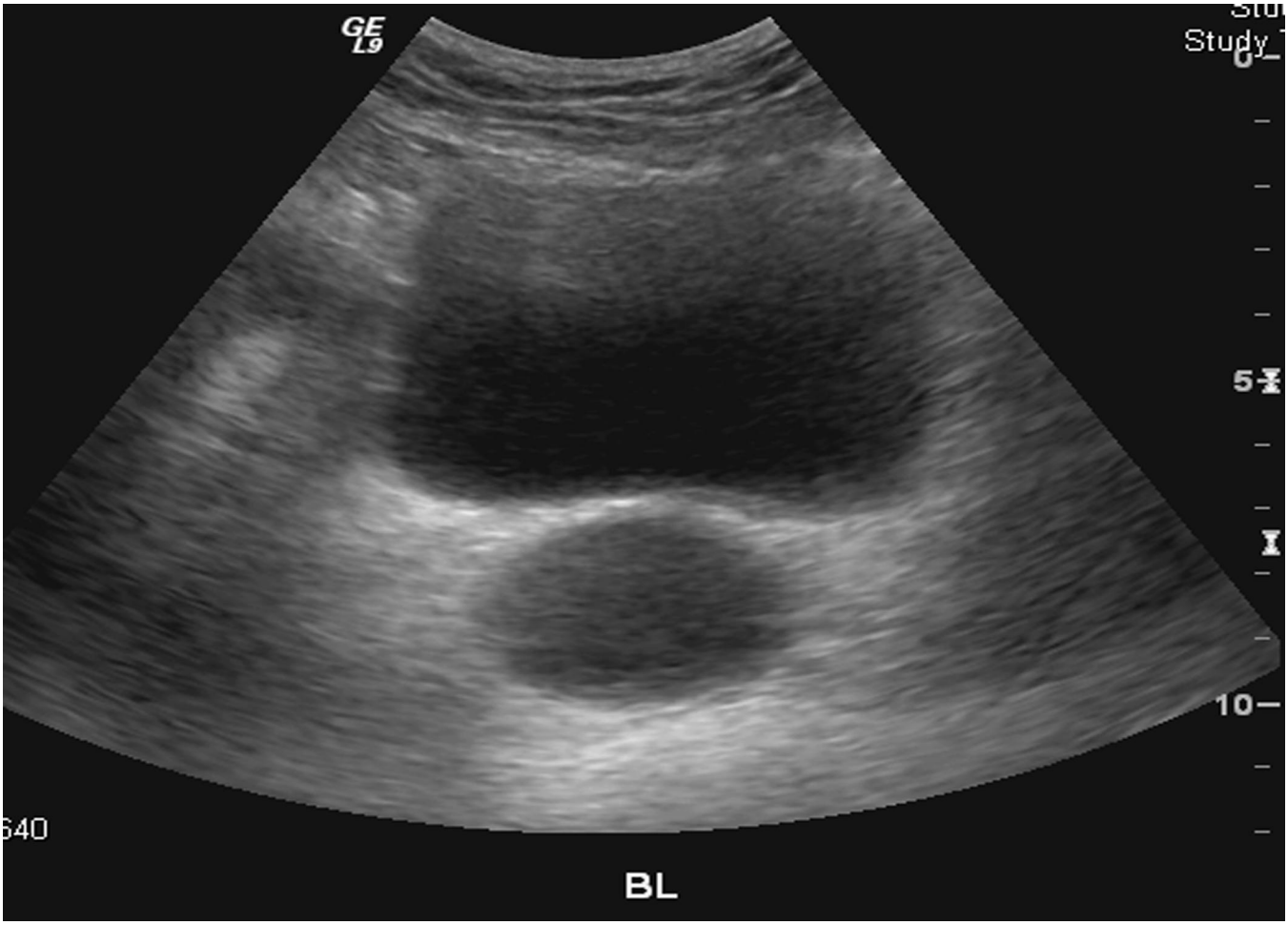
A. race.
B. constipation.
C. nocturnal enuresis.
D. fever with initial infection.
E. VUR.

49. A 58-year-old man has incontinence and prolonged urination six months following radical retropubic prostatectomy. Urodynamic evaluation with a 10 Fr catheter demonstrates normal bladder capacity and no detrusor overactivity. At 250 ml, Valsalva maneuver increases bladder pressure to 150 cm H_2O without evidence of urinary leakage. The etiology of the incontinence is best determined by:

A. remove catheter and repeat Valsalva maneuver.
B. repeat urodynamic study with suprapubic catheter.
C. uroflowmetry.
D. retrograde urethrogram.
E. cystoscopy.

50. A seven-year-old boy has had multiple repairs for penoscrotal hypospadias. He has recurrent lower UTIs and postvoid dribbling. Renal ultrasound is normal and a pelvic ultrasound is shown. The most likely diagnosis is:

A. mesonephric duct cyst.
B. ectopic ureter.
C. Cowper's duct cyst.
D. prostatic utricle.
E. bladder diverticulum.



51. The blood supply to the left adrenal gland is derived from branches from the following arteries:

A. aorta and renal.
B. renal and splenic.
C. renal, splenic, and inferior phrenic.
D. aorta, renal, and inferior phrenic.
E. aorta, renal, and splenic.

52. A 72-year-old man develops dyspnea and hypertension following nephrectomy for RCC with adrenal sparing. The preoperative CT scan shows aortic calcification and a ventilation perfusion scan shows a low probability of pulmonary emboli. The best agent to treat the hypertension is a:

A. diuretic.
B. calcium channel blocker.
C. alpha-blocker.
D. ACE inhibitor.
E. angiotensin receptor blocker.

53. A 45-year-old man has left flank pain four hours after a MVC. Physical examination is normal. His blood pressure is 110/60 mmHg, pulse is 80 bpm, and urinalysis demonstrates 5 RBC/hpf. The next step is:

A. cystogram.
B. CT scan.
C. renal ultrasound.
D. isotope renography.
E. observation.

54. Using a monopolar loop, two > 3 cm bladder tumors are endoscopically resected from the bladder dome and left trigone. At the end of the procedure, suprapubic distension is noted. Blood drawn at this point is most likely to reveal:

A. anemia.
B. high glycine level.
C. hyperammonemia.
D. hyponatremia.
E. elevated BUN.

55. A 62-year-old man has a right adrenalectomy for an 8 cm pheochromocytoma and 1 of 4 paracaval lymph nodes reveals involvement with tumor. Serum metanephrines, MIBG scan, and blood pressure are normal postoperatively. The next step is:

A. observation.
B. somatostatin.
C. mitotane.
D. metyrapone.
E. aminoglutethimide.

56. An 82-year-old woman has asymptomatic E. coli bacteriuria. The next step is:

A. ciprofloxacin.
B. trimethoprim-sulfamethoxazole.
C. nitrofurantoin.
D. re-culture urine.
E. observation.

57. A 12-year-old girl with spina bifida and sigmoid cystoplasty has had multiple recurrent bladder stones. To reduce the risk of further bladder stones, the next step is:

A. potassium citrate.
B. antibiotic prophylaxis.
C. increase ClC frequency.
D. irrigate bladder daily.
E. conversion to a ileocystoplasty.

58. A 22-year-old man sustains a complete T8 spinal cord injury. Four weeks after the injury, the urodynamic profile is best characterized by:

A. detrusor overactivity, functional smooth sphincter, guarding reflex present.
B. detrusor overactivity, functional smooth sphincter, guarding reflex absent.
C. detrusor areflexia, functional smooth sphincter, guarding reflex absent.
D. detrusor areflexia, smooth sphincter dyssynergy, guarding reflex absent.
E. detrusor areflexia, functional smooth sphincter, guarding reflex present.

59. A 20-year-old man with cystinuria has recurrent calculi despite dietary therapy and hydration. The next step is:

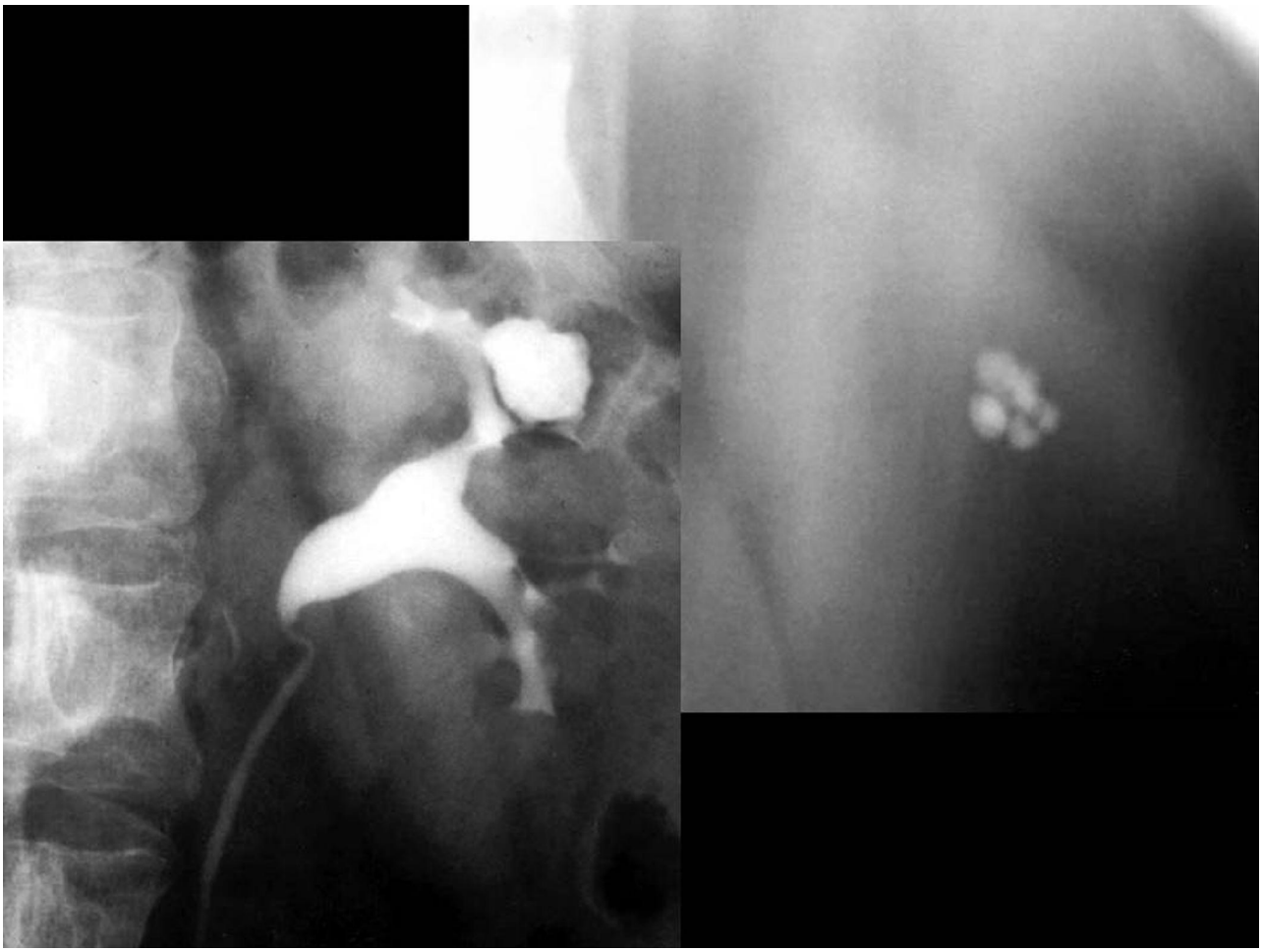
A. acetohydroxamic acid.
B. Tham-E.
C. N-acetylcysteine.
D. D-penicillamine.
E. alpha-mercaptopropionylglycine.

60. A ten-year-old boy has a three-day history of painless, gross hematuria with a tea color appearance. He was diagnosed with streptococcal pharyngitis two weeks ago. Urinalysis shows > 100 RBC/hpf and trace proteinuria. The next step is:

A. repeat urinalysis in two weeks.
B. VCUG.
C. non-contrast CT scan.
D. cystoscopy.
E. renal biopsy.

61. A 32-year-old man has left flank pain. Scout film and retrograde pyelogram are shown. The next step is:

A. CT scan without contrast.
B. CT scan with I.V. contrast.
C. SWL.
D. PCNL.
E. laparoscopic calyceal diverticulectomy.



62. Homologous natural cycle artificial insemination for couples with male factor infertility due to oligoasthenospermia is:

A. only effective if placed intracervically.
B. only effective if placed intrauterine.
C. no more effective than timed vaginal intercourse.
D. most effective in women with tubal disorders.
E. most useful with counts of < 10 million per ejaculate.

63. A five-year-old boy with a history of PUV ablation is incontinent day and night. Renal ultrasound shows normal kidneys bilaterally. VCUG shows a mildly trabeculated bladder without VUR and a patent urethra. PVR is 10 ml. He has normal daily bowel movements. The urinalysis is normal, and he has not had any UTIs. The next step is:

A. timed voiding.
B. nocturnal bladder drainage.
C. urodynamic study.
D. oxybutynin.
E. desmopressin.

64. An 85-year-old woman in an assisted living facility with a history of asymptomatic bacteriuria has two days of urinary frequency, urgency, and incontinence. A urine culture reveals 10^5 CFU/ml pan sensitive E. coli. The next step is:

A. observation.
B. PVR, cystoscopy, and upper tract imaging.
C. single dose antibiotic therapy.
D. antibiotic therapy for seven days.
E. topical vaginal estrogen.

65. A 35-year-old man with a history of left renal colic has a 5 mm calculus in the left renal pelvis. Two months later, he complains of a burning sensation in the distal urethra. He has a normal urinary stream, and there are no associated bladder symptoms. Based upon this clinical history, the calculus is most likely located in the:

A. upper ureter.
B. mid-ureter.
C. intramural ureter.
D. bladder.
E. urethra.

66. A five-year-old girl is evaluated for a febrile UTI. She has daytime urgency and rare wetting. She is dry at night. Physical examination is normal. A renal US is normal and a VCUG shows bilateral grade 2 VUR. Spina bifida occulta at L5 is noted on the scout film. The next steps are prophylactic antibiotics and:

A. spinal MRI scan.
B. urodynamics.
C. timed voiding.
D. oxybutynin.
E. endoscopic correction of reflux.

67. A 48-year-old man has an AUA Symptom Score of 26 and a bother score of 4, recurrent UTIs, and significant bladder outlet obstruction documented on urodynamics. He wants to maintain fertility. He has failed medical therapy. The next step is:

A. CIC.
B. unilateral TUIP.
C. bilateral TUIP.
D. laser vaporization of the prostate.
E. TURP.

68. The principal source of operator radiation exposure during endourologic procedures is:

A. the primary radiation beam.
B. radiation leakage from the x-ray tube.
C. radiation scatter from the patient.
D. radiation scatter from endoscopic instruments.
E. radiation scatter from the operating room walls and floor.

69. The therapy with the highest success and lowest relapse rate for uncomplicated primary nocturnal enuresis is:

A. behavioral modification.
B. oxybutynin.
C. imipramine.
D. DDAVP.
E. nocturnal enuretic alarm.

70. A 45-year-old woman has new onset frequency, urgency, and urge incontinence. Urinalysis is negative. Residual urine is 90 ml. CMG reveals phasic detrusor overactivity throughout filling. During volitional voiding, there is simultaneous contraction of the external sphincter. The next step is:

A. referral for neurological evaluation.
B. cystoscopy and cytology.
C. antimuscarinic therapy.
D. intradetrusor onabotulinum toxin injections.
E. intradetrusor and intrasphincteric onabotulinum toxin injections.

71. A 60-year-old man sustains an avulsion injury of the scrotum. Ninety percent of the scrotal skin is lost. The next step after one week of debridement and local wound care is:

A. rotational thigh skin flap.
B. full thickness skin graft.
C. placement of testicles in thigh pouches.
D. split thickness skin graft.
E. scrotal skin mobilization and direct closure.

72. A seven-year-old boy is a restrained front seat passenger in an MVC in which air bag deployment is noted. In the ER, he has right flank pain. Physical exam reveals mild right sided abdominal and CVA tenderness. No hypotension was noted in the field or in the ER. Hgb is 12.5 and urinalysis shows 25 RBC/hpf. The next step is:

A. observation.
B. serial CBC and urinalysis.
C. abdominal ultrasound.
D. abdominal CT scan with contrast.
E. cystogram.

73. A 47-year-old woman is undergoing percutaneous test stimulation of a lead for sacral neuromodulation. Plantar flexion and rotation of the foot is noted along with sensation in the buttock. The next step is to:

A. maintain lead and discharge home.
B. place the lead one foramen higher and re-test.
C. place the lead one foramen lower and re-test.
D. advance the lead deeper into the foramen and re-test.
E. withdraw the lead to a more superficial location in the foramen and re-test.

74. A 65-year-old man has lethargy, malaise, and a markedly diminished urinary stream. After urethral catheterization, he experiences a postobstructive diuresis that is managed by appropriate fluid replacement. Urine output is 1,500 ml daily. Serum creatinine and BUN are 6.8 mg/dl and 95 mg/dl respectively, and unchanged three days later. The next step is:

A. continued observation.
B. retrograde pyelography.
C. dialysis.
D. renal ultrasound.
E. increased fluid replacement.

75. A two-year-old boy with hemihypertrophy should undergo:

A. twice yearly physical exam of abdomen.
B. renal ultrasound every three months.
C. twice yearly urinalysis and urinary metanephrine level.
D. annual abdominal CT scan.
E. abdominal MRI scan every six months.

76. Autoinflation of an inflatable penile prosthesis is best prevented by:

A. use of a smaller reservoir.
B. postoperative partial cylinder inflation.
C. intraperitoneal reservoir placement.
D. reservoir placement in subinguinal canal.
E. use of a reservoir with a lockout valve.

77. A 45-year-old man undergoes bilateral end to side vasoepididymostomy. Semen analysis six months later demonstrates azoospermia. The next step is:

A. observation.
B. measurement of FSH.
C. clomiphene citrate therapy.
D. TRUS.
E. testicular sperm retrieval.

78. A four-year-old girl voids normally but is continuously wet. A renal ultrasound shows normal appearing kidneys bilaterally. The next step is:

A. MAG-3 renal scan.
B. VCUG.
C. MRI scan
D. cystoscopy and vaginoscopy.
E. retrograde pyelogram.

79. Urodynamic stress urinary incontinence is defined as urinary leakage that occurs:

A. with a cough-induced detrusor contraction.
B. during a rise in intraabdominal pressure in the absence of a detrusor contraction.
C. with a rise in detrusor pressure.
D. involuntarily per urethra during urodynamic testing.
E. in the absence of increased in intraabdominal pressure and a voluntary detrusor contraction.

80. A 64-year-old man has painless right testicular swelling of three months duration. Urinalysis is normal, and testicular ultrasound reveals an enlarged right testis with multiple hypoechoic lesions. The most likely diagnosis is:

A. lymphoma.
B. chronic lymphocytic leukemia.
C. spermatocytic seminoma.
D. teratocarcinoma.
E. embryonal cell carcinoma.

81. In a newborn with penoscrotal hypospadias and nonpalpable testes, the most important test is:

A. serum for 17-hydroxyprogesterone.
B. determination of testosterone:dihydrotestosterone ratio.
C. hCG stimulation test.
D. pelvic ultrasound.
E. genitogram.

82. A 28-year-old woman has significantly decreased libido six months after starting oral contraceptive pills. The most likely cause of her decreased sexual desire is:

A. reduced serum estradiol.
B. reduced serum progesterone.
C. reduced serum testosterone.
D. decreased sex hormone binding globulin.
E. increased serum prolactin.

83. The best predictor of long-term recurrence-free status in a patient with non-invasive bladder cancer is:

A. tumor size.
B. Rb mutation.
C. tetraploid flow cytometry.
D. negative random biopsies.
E. negative cystoscopy three months after a TURBT.

84. Urinary concentration is primarily the result of which characteristic of the kidney:

A. hypertonic medullary interstitial fluid.
B. absence of ADH.
C. hypotonic medullary interstitial fluid.
D. high levels of ADH.
E. hypertonic proximal tubular fluid.

85. A 60-year-old healthy woman with recurrent UTIs has free air in the bladder and a thickened bladder wall adjacent to a loop of thickened colon see on CT scan. Cystoscopy demonstrates erythema in the bladder wall with no clear fistula. The next step is:

A. antibiotic prophylaxis.
B. high pressure cystogram.
C. CT scan with small bowel follow through.
D. MRI scan.
E. general surgery consult/exploratory laparotomy.

86. A 26-year-old man undergoes a left radical orchiectomy for seminoma. CT scan reveals two 3 cm interaortocaval nodes. Two weeks after orchiectomy, the AFP is unchanged at 25 IU/ml and beta-hCG is 8 mIU/ml. The next step is:

A. infradiaphragmatic XRT.
B. cisplatin-based chemotherapy.
C. infradiaphragmatic plus supradiaphragmatic XRT.
D. RPLND.
E. RPLND plus cisplatin-based chemotherapy.

87. A four-year-old uncircumcised boy has a two-week history of foreskin swelling with urination. The retained urine under the foreskin drains slowly following completion of voiding. There is no dysuria or hematuria. Physical exam reveals mild erythema of the distal foreskin and a phimotic ring. The meatus cannot be visualized. The next step is:

A. observation.
B. sitz baths.
C. topical steroid ointment.
D. dorsal slit.
E. circumcision.

88. A 65-year-old man has been using 20 mg of tadalafil (Cialis^{TM}) as needed for treatment of erectile dysfunction. His primary care provider starts him on doxazosin for hypertension. His treatment of erectile dysfunction should include:

A. continue tadalafil 20 mg as needed.
B. decrease tadalafil to 10 mg as needed.
C. start tadalafil for once daily use at 5 mg/day.
D. stop tadalafil.
E. switch to intracorporal alprostadil.

89. A 40-year-old woman undergoes bilateral adrenalectomy for Cushing's disease with complete resolution of her symptoms. Her replacement therapy consists of cortisone and fluorocortisone. Three years later, she complains of visual disturbances and has skin hyperpigmentation. The most likely explanation is:

A. Addison's disease.
B. pituitary adenoma.
C. excessive cortisone replacement.
D. excessive ACTH production.
E. ectopic melanocyte-stimulating hormone secretion.

90. Prolapse of a vesicostomy is best avoided by:

A. making the stoma no bigger than 12 Fr.
B. resecting excess bladder wall tissue.
C. placing the stoma at the bladder dome.
D. circumferential suturing of bladder to rectus fascia.
E. placing a stoma midway between symphysis pubis and umbilicus.

91. Hypercoagulability in patients with ESRD secondary to nephrotic syndrome is due to:

A. hypohomocystinenemia.
B. urinary loss of antithrombin III.
C. retention of protein S.
D. retention of protein C.
E. decreased antiphospholipid antibodies.

92. The most frequent complications associated with the use of mitomycin C for intravesical therapy are:

A. chemical cystitis and rash.
B. myelosuppression and rash.
C. flu-like symptoms and myelosuppression.
D. contracted bladder and chemical cystitis.
E. myelosuppression and chemical cystitis.

93. A one-year-old boy with a familial bleeding disorder receives I.V. DDAVP prior to a hypospadias repair. Appropriate fluid management would include:

A. 1/4 NS intraoperatively; encourage p.o. fluids postoperatively.
B. 1/4 NS intraoperatively; continue I.V. fluids for four hours postoperatively.
C. 1/4 NS intraoperatively; drink to thirst postoperatively.
D. NS intraoperatively; encourage p.o. fluids postoperatively.
E. NS intraoperatively; drink to thirst postoperatively.

94. A 66-year-old man had a radical prostatectomy six years ago for localized prostate cancer. He has had no evidence of recurrence and an undetectable PSA. He now has loss of libido, declining muscle mass, lethargy, and erectile dysfunction. His serum testosterone is 160 ng/dl, and his LH and prolactin levels are normal. The next step is:

A. explain that testosterone is contraindicated.
B. delay testosterone treatment until he is disease free for ten years.
C. start testosterone after a thorough discussion.
D. start yohimbine.
E. start PDE5 inhibitor.

95. A 79-year-old man with congestive heart failure has gross hematuria. CT urogram reveals a 6 mm distal right ureteral filling defect. Right ureteral washing for cytology are positive for high grade carcinoma. Serum creatinine of 1.9 mg/dl is stable. The next step is:

A. retrograde pyelogram and ureteral washing in four months.
B. ureteral stent placement and intravesical BCG.
C. ureteroscopic biopsy and laser ablation.
D. distal ureterectomy and reimplantation.
E. nephroureterectomy.

96. A 25 cm segment of ileum is isolated for bladder augmentation and reconfigured into a "U" shape. A sagittal incision of the bladder is made. The most dependent portion of the intestinal patch will not reach the apex of the incision by the bladder neck even after the mesentery is aggressively mobilized. The next step is:

A. reconfigure the intestine into an "S" shape.
B. incise both sides of the peritoneum overlying the mesentery.
C. ligate branching vessels of the vascular arcade.
D. partially close the anterior wall of the bladder.
E. isolate an additional intestinal segment for composite augmentation.

97. A 67-year-old man develops erythema and mild tenderness in the scrotum six weeks following placement of a three-piece inflatable penile prosthesis. He has no tenderness or erythema in the penile shaft or suprapubic area. The best treatment is:

A. oral antibiotic therapy for six weeks.
B. I.V. antibiotic therapy for six weeks.
C. removal and replacement of the scrotal pump.
D. removal of the entire device and replacement in six months.
E. removal of the device with washout and immediate replacement.

98. When performing urinary diversion, the gastrointestinal segment associated with the highest potassium loss is:

A. stomach.
B. jejunum.
C. proximal ileum.
D. distal ileum.
E. colon.

99. A seven-year-old boy has recurring abdominal pain one to two times per month. Episodes consist of left flank discomfort, nausea, and vomiting. On ultrasound, there is mild left hydronephrosis. A MAG-3 Lasix renal scan shows 50% differential function and a T1/2 of eight minutes bilaterally. Two urinalyses demonstrate 2-5 RBCs/hpf. The test most likely to yield the diagnosis is:

A. non-contrast CT scan.
B. VCUG.
C. MR urogram.
D. ultrasound of kidneys during pain.
E. left antegrade renal perfusion study (Whitaker).

100. A 67-year-old woman is undergoing surgery for repair of a post-hysterectomy vesicovaginal fistula located above the trigone with communication to the vaginal vault. A vaginal repair is selected. The best flap to interpose is:

A. peritoneal.
B. omental.
C. Martius.
D. labial myocutaneous.
E. gracilis.

101. The drug that can be reabsorbed by an ileal neobladder and result in toxic serum levels is:

A. phenytoin.
B. trimethoprim-sulfamethoxazole.
C. sildenafil.
D. warfarin.
E. furosemide.

102. Gadolinium based contrast, compared to iodinated contrast, in patients on dialysis have a greater risk of:

A. anaphylactic reaction.
B. nephrotoxicity.
C. itching.
D. systemic fibrosis.
E. congestive heart failure.

103. A six-month-old infant with severe pulmonary hypertension is on I.V. sildenafil at the dose of 1.2 mg/kg every six hours. After two days, he is successfully weaned off inhaled nitric oxide. He develops a sustained erection that has lasted 12 hours. The next step is:

A. observation.
B. discontinue I.V. sildenafil.
C. lower I.V. sildenafil dose.
D. switch to oral sildenafil.
E. re-initiate inhaled nitric oxide.

104. A 67-year-old man with a clinical stage T2bN0M0 Gleason 6 prostate cancer with a PSA of 7.8 ng/ml is treated with 70 Gy external beam XRT. His PSA nadirs to 0.8 ng/ml six months after therapy. Six months later, he is asymptomatic, has a normal DRE, and a PSA of 6.5 ng/ml. The most likely explanation for the elevated PSA level is:

A. prostatic infarct.
B. persistent prostate cancer.
C. PSA bounce effect.
D. radiation-induced prostatitis.
E. insufficient period of observation after therapy.

105. A one-month-old girl with severe congenital heart disease had an episode of urosepsis. She has a solitary kidney with upper pole hydroureteronephrosis. Her renal scan shows 33% function in the upper pole with UVJ obstruction and a massively dilated upper pole ureter. The lower pole system is normal. The VCUG shows no reflux. The next step is antibiotic prophylaxis and:

A. percutaneous nephrostomy.
B. tapered upper pole reimplant.
C. upper pole distal cutaneous ureterostomy.
D. upper pole to lower pole distal ureteroureterostomy.
E. upper pole heminephroureterectomy.

106. A 35-year-old woman with advanced multiple sclerosis and very impaired manual dexterity has severe urinary urgency and incontinence that does not respond to high dose antimuscarinic therapy. Urodynamics confirms neurogenic detrusor overactivity with a detrusor LPP of 70 cm H_2O. The best long-term treatment option is:

A. urethral catheter placement.
B. onabotulinum toxin injection of the bladder.
C. sacral neuromodulation.
D. augmentation cystoplasty.
E. ileal conduit.

107. A 50-year-old woman has acute left flank pain. Her hemoglobin is 7 gm/dl, and creatinine 2.1 mg/dl. CT scan shows a 15 cm lower-pole left renal mass and a large perinephric hematoma. There are low-density areas (Hounsfield units of -30) within the mass. After transfusion, the next step is:

A. observation.
B. selective angiographic embolization.
C. radical nephrectomy.
D. partial nephrectomy.
E. radio frequency ablation.

108. A three-year-old boy with sickle cell disease has painful priapism for two hours. Initial management should include intravenous hydration, pain management, O_2 supplementation and:

A. oral pseudoephedrine.
B. exchange transfusion.
C. aspiration of the corporal bodies with instillation of dilute phenylephrine.
D. Winter's shunt.
E. cavernosaphenous vein shunt.

109. A 59-year-old man with Parkinson's disease complains of decreased force of stream, urinary frequency, urgency, and recurrent UTI. PVR is 200 cc. The next step is:

A. uroflowmetry.
B. pressure flow urodynamics.
C. chronic suppressive antibiotics.
D. CIC.
E. TURP.

110. A 60-year-old man with erectile dysfunction has an impalpable right testicle. Ultrasound reveals a 2 x 2 cm homogeneous ovoid mass at the right internal ring. The next step is:

A. observation.
B. serial ultrasounds.
C. percutaneous biopsy.
D. orchidopexy.
E. orchiectomy.

111. A three-year-old boy who underwent a surgical correction for a high imperforate anus has inability to toilet train. VCUG reveals a large trabeculated bladder, grade 3 left VUR and incomplete bladder emptying. Ultrasound of the abdomen shows two normal kidneys. The next step is:

A. spinal ultrasound.
B. spinal MRI scan.
C. alpha-blocker.
D. CIC.
E. vesicostomy.

112. A 53-year-old woman reports leakage with sneezing and exercise. On physical exam, after voiding, she had no significant prolapse or leakage with coughing and strain. A voiding diary reveals three leaks per day over three days, and pad test reveals 40 gram weight gain each day of testing. Pelvic floor muscle training does not help the leakage. The next step is:

A. full bladder supine stress test.
B. VCUG.
C. antimuscarinic therapy.
D. periurethral injection.
E. midurethral sling.

113. A 62-year-old man who seven years earlier received XRT for prostate cancer undergoes TURBT for a pT2 bladder cancer. Metastatic work-up is negative. He desires orthotopic neobladder diversion. At the time of cystectomy, the bowel appears healthy and urethral frozen section is negative. The following diversion should be performed:

A. orthotopic neobladder using right colon.
B. orthotopic neobladder using distal ileum.
C. continent cutaneous diversion.
D. ileal loop conduit.
E. transverse colon conduit.

114. A 45-year-old woman undergoes evaluation for recurrent calcium phosphate stones. Serum calciums range from 9.6-10.0 mg/dl ; PTH 62 pg/dl; urine calcium 281 mg/day (normal < 200 mg/day); and urinary citrate 460 mg/day (normal > 320 mg/day). To further elucidate her metabolic diagnosis, she should be placed on a two week course of:

A. thiazide.
B. mercaptoproprinoglycine.
C. sodium cellulose phosphate.
D. orthophosphate.
E. potassium citrate.

115. After traumatic renal injury, the predictors of persistent bleeding are depth of parenchymal injury, presence of arterial blush, and:

A. urinary extravasation.
B. devitalized fragment.
C. thickness of hematoma.
D. location of laceration.
E. mechanism of injury.

116. A 73-year-old woman with a serum creatinine of 1.9 mg/dl undergoes right partial nephrectomy for a 4.5 cm hilar renal mass. Frozen section of the resected mass reveals chromophobe RCC with tumor less than 0.1 mm from the margin of resection in the area of renal sinus. The next step is:

A. no further therapy.
B. cryotherapy of resection bed.
C. radiofrequency ablation (RFA) of resection bed.
D. wide resection of renal sinus tissue.
E. completion radical nephrectomy.

117. A healthy, ten-year-old girl has several urinalyses that show 2+ proteinuria. The next step is:

A. ASO titer and complement levels.
B. serum BUN and creatinine levels.
C. 24-hour urine for protein and creatinine.
D. spot urine for protein and creatinine.
E. first morning urine for protein and creatinine.

118. In a man with azoospermia and elevated FSH, the best predictor of sperm retrieval from the testicle is:

A. serum FSH level.
B. testosterone level.
C. Y chromosome deletion subtype.
D. seminal volume.
E. presence of the vas deferens.

119. A 76-year-old man has back pain. Seven years ago, he had a bilateral orchiectomy for T3NXM0 prostate cancer. MRI scan of the spine demonstrates a nonpathologic vertebral compression fracture. PSA is undetectable. The next step is:

A. observation.
B. bone scan.
C. DEXA scan (bone densitometry).
D. antiandrogen therapy.
E. local radiotherapy.

120. A 38-week-gestation newborn with a PUV has a serum creatinine of 1.1 mg/dl on day two of life. This child's serum creatinine value:

A. will not change with a rapid rise in GFR.
B. is a predictor of future poor renal function.
C. will decrease with completion of nephrogenesis.
D. is not reflective of the degree of renal function impairment.
E. will result in increased active sodium absorption from the descending limb of the loop of Henle.

121. Ureteral peristalsis originates from:

A. preganglionic sympathetic input from T8 through L1.
B. postganglionic fibers arising from the celiac and aorticorenal plexuses.
C. parasympathetic input from the S2 through S4 spinal segments.
D. parasympathetic input from the vagus nerve.
E. intrinsic smooth muscle pacemaker sites in the minor calyces.

122. Ductal carcinoma of the prostate:

A. is best managed with chemotherapy.
B. is associated with high grade disease and recurrence.
C. confers no additional risk.
D. should be graded as Gleason grade 5.
E. commonly arises from the transition zone.

123. A five-year-old boy has precocious puberty. Scrotal ultrasound reveals a mass in the upper pole of the left testis. FSH and LH are normal prepubertal levels. Testosterone and urinary 17-ketosteroid levels are significantly elevated. The urinary pregnanetriol levels are normal. The next step is:

A. glucocorticoid therapy.
B. biopsy of the mass.
C. enucleation of the mass.
D. simple orchiectomy.
E. radical orchiectomy.

124. Compared to high-level disinfection (Cidex^{TM} -glutaraldehyde), sterilization of a flexible cystoscope offers greater protection against contamination by:

A. bacteria.
B. bacterial spores.
C. Mycobacterium tuberculosis.
D. virus.
E. fungi.

125. A 55-year-old woman with metastatic RCC has received five months of therapy with sunitinib. She undergoes uneventful right laparoscopic radical nephrectomy for a 5 cm upper pole renal mass. On post-op day one, she is obtunded, febrile, and complains of nausea and diffuse abdominal pain. BP is 80/50 mm Hg, HR 78 bpm, and urine output is 30 ml over four hours. Laboratory studies show a stable hemoglobin of 13.5 g/dl, and normal WBC. Chemistry studies are pending. The next step is normal saline fluid bolus and:

A. I.V. dexamethasone.
B. I.V. desmopressin.
C. CT scan of abdomen and pelvis.
D. angiography.
E. surgical exploration.

126. A patient with an ileal conduit urinary diversion is undergoing renal function tests. The parameter that can be most accurately measured is:

A. creatinine clearance.
B. urinary concentrating ability.
C. fractional excretion of sodium.
D. acid loading.
E. proteinuria.

127. A 62-year-old man with Klinefelter Syndrome underwent a mastectomy for breast cancer three months ago. He complains of decreased energy and decreased libido. A total testosterone is 210 ng/dl and LH is 15 IU/l. The next step is therapy with:

A. oral phosphodiesterase inhibitors.
B. low dose transdermal estrogen.
C. aromatase inhibitors.
D. testosterone.
E. beta-hCG.

128. A 62-year-old man has a radical prostatectomy for prostate cancer. Histology reveals a Gleason 9, pT3aN1Mx cancer with negative surgical margins. His post-prostatectomy PSA is < 0.1 ng/ml. To minimize his risk of relapse, the next step is:

A. adjuvant docetaxel.
B. external beam XRT.
C. LH-RH agonist therapy for six months.
D. lifelong LH-RH agonist therapy.
E. LH-RH agonist therapy for six months and external beam XRT.

129. A five-year-old girl has a history of VUR that has resolved spontaneously. Five months after stopping prophylactic antibiotics, she has dysuria, frequency, urgency, and urge incontinence. She is afebrile and a urine culture is positive for > 10^5 E coli. The next step is treatment of UTI and:

A. voiding diary and timed voiding.
B. restart prophylactic antibiotics.
C. VCUG.
D. DMSA renal scan.
E. urodynamics.

130. A 33-year-old woman has dysuria and fever. Urinalysis shows specific gravity of 1.025, leukocyte esterase positive and nitrite negative. There are 10 RBC's and 30 WBC's per hpf on microscopy. Urine culture will likely grow:

A. Escherichia coli.
B. Pseudomonas aeruginosa.
C. Serratia marcescens.
D. Klebsiella oxytoca.
E. Proteus mirabilis.

131. A patient with a history of low-grade Ta superficial urothelial carcinoma of the bladder has three new bladder lesions 14 months after last resection. Histology reveals that two of the tumors are Ta while the third is T1. No muscularis propria is seen in the specimens. The next step is:

A. surveillance cystoscopy every three months.
B. intravesical mitomycin C therapy.
C. intravesical BCG therapy.
D. intravesical BCG plus interferon therapy.
E. repeat transurethral resection.

132. A 14-year-old girl has primary amenorrhea. She is in the 25th percentile for height and has a webbed neck. Her karyotype is 45 XO. The most likely genitourinary abnormality is:

A. renal agenesis.
B. horseshoe kidney.
C. VUR.
D. UPJ obstruction.
E. vaginal agenesis.

133. A 45-year-old woman with hypocitraturia and chronic diarrhea is prescribed potassium citrate tablets three times daily. She notices whole tablets in her bowel movements. The next step is:

A. continue therapy, as the medication is still absorbed.
B. increase the medication dosage.
C. switch to liquid preparation of potassium citrate.
D. increase the medication frequency.
E. switch to baking soda.

134. A 55-year-old man seeks consultation regarding prostate cancer screening. According to the U.S. Prostate, Lung, Colon, and Ovarian (PLCO) trial, prostate cancer screening increases:

A. prostate cancer detection.
B. detection of Gleason's score 8-10 tumors.
C. detection of high stage (advanced) tumors.
D. prostate cancer survival.
E. quality of life in men with elevated PSA.

135. A nine-year-old boy has intermittent gross, painless hematuria. Urinalysis is normal except for numerous red cells without casts. Urine culture and ultrasound are negative. A percutaneous renal biopsy shows segmental glomerulonephritis with immunoglobulin deposition in mesangial areas. The diagnosis is:

A. Alport's syndrome.
B. Henoch-Schonlein purpura.
C. membranous glomerulonephritis.
D. IgA nephropathy.
E. hemolytic uremic syndrome.

136. A 32-year-old woman with severe pyelonephritis is receiving ampicillin combined with a single daily dose of tobramycin, 7 mg/kg. After 36 hours, she remains febrile and has persistent flank pain. Following the second dose, a trough serum tobramycin level is 12 mcg/ml (5-10 mcg/ml). The next step is:

A. continue current tobramycin regimen.
B. continue tobramycin and start n-acetyl cysteine.
C. decrease tobramycin dose.
D. decrease tobramycin frequency.
E. discontinue tobramycin and start aztreonam.

137. A 30-year-old man has persistent hypertension and paroxysmal headaches. Plasma catecholamine levels are 1100 ng/l. Three hours after a single oral dose of clonidine, 0.3 mg, catecholamine levels are 400 ng/l. The most likely diagnosis is:

A. renal artery stenosis.
B. pheochromocytoma.
C. essential hypertension.
D. adrenal hyperplasia.
E. idiopathic hyperaldosteronism.

138. A healthy five-year-old boy is evaluated for bloody urethral discharge. VCUG demonstrates a diverticulum of the bulbous urethra. The most likely explanation for the radiographic finding is:

A. utricle.
B. straddle injury.
C. meatal stenosis.
D. urethral duplication.
E. Cowper's gland duct cyst.

139. A 25-year-old man is struck by an automobile. He has a left superior and inferior pubic ramus fracture as well as a fracture of the sacroiliac joint. He has a palpable bladder. No blood is noted at the meatus and the prostate is in normal position on DRE. The next step is:

A. CT urogram.
B. retrograde urethrogram.
C. cystogram.
D. abdominal ultrasound.
E. suprapubic tube.

140. In a 65-year-old man with RCC, the panel of molecular markers that would be most predictive of good prognosis is:

A. high carbonic anhydrase IX, absent vimentin, absent p 53 expression.
B. low carbonic anhydrase IX, positive vimentin, absent p53 expression.
C. high carbonic anhydrase IX, positive vimentin, positive p53 expression.
D. low carbonic anhydrase IX, absent vimentin, positive p53 expression.
E. high carbonic anhydrase IX, positive vimentin, positive p53 expression.

141. A three-year-old child with a duplicated collecting system has VUR to the upper renal segment upon voiding. The most appropriate statement is:

A. this type of anomaly is commonly bilateral.
B. the ureter to the upper segment is ectopic.
C. the ureter to the lower segment is ectopic.
D. the ureter to the lower segment is obstructed.
E. reflux to the upper system occurs frequently with complete ureteral duplication.

142. A 26-year-old man had blunt abdominal trauma. An abdominal CT scan revealed a deep renal laceration and urinary extravasation. After ten days of expectant management, a repeat CT scan reveals persistent urinary extravasation with a small urinoma. He remains stable and afebrile. The next step is:

A. continued observation.
B. insertion of a ureteral stent.
C. percutaneous perinephric drainage.
D. percutaneous nephrostomy drainage.
E. surgical exploration and repair.

143. The factor most predictive of finding fibrosis only during post-chemotherapy RPLND for germ cell tumor is:

A. use of bleomycin chemotherapy regimen.
B. size of pre-chemotherapy retroperitoneal mass.
C. normal post-chemotherapy CT scan.
D. teratoma in primary tumor.
E. normal preoperative serum tumors markers.

144. An eight-year-old, 25 kg boy with pyelonephritis has vomiting and diarrhea for three days. Serum electrolytes are: sodium 150 mEq/l, potassium 3.0 mEq/l, chloride 117 mEq/l, bicarbonate 25 mEq/l. The most appropriate I.V. therapy for the first 24 hours is:

A. 0.25 NS with 40 mEq/l of KCl at 100 cc/hr.
B. D5W with 40 mEq/l of KCl at 200 cc/hr.
C. NS with 40 mEq/l of KCl at 100 cc/hr.
D. NS with 40 mEq/l of KCl at 75 cc/hr.
E. D5W with 10 mEq/l of KCl at 200 cc/hr.

145. A 37-year-old man sustains a high velocity pelvic gunshot wound with no obvious ureteral injury at exploration. Two days later, during a scheduled second look operation the distal ureter appears contused. There is no extravasation of I.V. indigo carmine. The next step is:

A. continued observation.
B. cystoscopy and ureteral stent.
C. percutaneous nephrostomy.
D. ureteroneocystostomy.
E. debridement and ureteroureterostomy.

146. During open inguinal hernia repair, a 19-year-old man undergoes complete excision of an incidental 2 cm spermatic cord mass. The final pathology shows well-differentiated leiomyosarcoma with negative surgical margins. A metastatic survey is negative. The next step is:

A. surveillance.
B. inguinal orchiectomy with high ligation of the cord.
C. XRT to the inguinal region.
D. RPLND.
E. systemic chemotherapy.

147. During an abdominal surgery, a solid fibrous cord-like structure is encountered, coursing lateral to the bladder and ascending on the posterior aspect of the anterior abdominal wall toward the umbilicus. This structure represents a remnant of the:

A. Wolffian duct.
B. Müllerian duct.
C. urogenital sinus.
D. hypogastric artery.
E. umbilical vein.

148. A 35-year-old man has primary infertility. On physical exam, neither vas deferens is palpable, each testis is 34 ml in volume. Semen analysis reveals a 0.3 ml volume and azoospermia. The man and his wife would like to pursue all options for parenthood. The next step is:

A. scrotal ultrasound.
B. Y-chromosome microdeletion analysis and karyotype.
C. cystic fibrosis mutation analysis on both partners.
D. diagnostic testicular biopsy with scrotal exploration.
E. donor sperm intrauterine insemination.

149. A 20 year-old man with stage 1 NSGCT (80% yolk sac, 20% seminoma) without lymphovascular invasion opts for surveillance but is concerned about radiation doses he will receive with CT scans. A reasonable treatment schedule for his CT surveillance would be:

A. chest and abdominal/pelvic CT scans at 3, 6, 9, 12, and 24 months.
B. abdominal/pelvic CT scans at 3, 12, and 24 months.
C. chest and abdominal CT scans at 3 and 24 months.
D. abdominal CT scan at 12 months.
E. chest and abdominal CT scans at 3 and 12 months.

150. An eight-year-old boy undergoes PCNL. An intraoperative nephrostogram shows contrast in the large bowel. The best management is ureteral stent and:

A. diverting colostomy.
B. primary colonic repair.
C. remove nephrostomy and low residue diet.
D. retain nephrostomy and perform barium enema.
E. withdraw nephrostomy into colon.