Case 1
Case 1
What is the next step?

A. Drug therapy
B. Biopsy
C. Drainage
D. Embolization
E. Surgery
Renal Abscess

- Caused by ascending infection or hematogenous spread
- Risk factors include immunocompromised state, diabetes, underlying urinary tract problem, or obstructive mass
- Symptoms are variable and not always significant
- Small <3-4 cm lesions may respond to antibiotics alone
- Larger lesions usually require catheter drainage
- Drainage complications are rare
- Surgery may be required for perinephric, mixed perinephric/renal, and multiloculated collections

Removal of Abscess Drainage Catheters

- Improvement in symptoms
- Normalization of WBC
- Drainage volume < 10cc/day for several days

- Consider imaging (sinogram or CT)
  - Initial complex collection
  - Fistula possible/likely
  - Continued slow drainage
  - Persistent symptoms
Case 2

Which diagnosis is least likely?

A. Cholangiocarcinoma
B. Metastatic disease from ovarian cancer
C. Ischemic cholangiopathy
D. Pancreatic cancer
E. Primary sclerosing cholangitis
What is the best long-term management?

A. External drain  
B. Internal/external drain  
C. Internal plastic stent  
D. Bare metal stent  
E. Covered stent

Case 4  
Which is NOT an indication for percutaneous cholecystostomy?

A. Calculus cholecystitis in critically ill patient  
B. Acalculous cholecystitis with sepsis of unknown origin  
C. Gallbladder rupture  
D. Gallbladder carcinoma
When can the catheter be removed?
Case 5

The best antibiotic prior to nephrostomy:

A. Clindamycin
B. Cefazolin
C. Ciprofloxacin
D. Colchicine
E. No prophylactic antibiotic is necessary for this procedure
Now what??
Case 6
Best route for percutaneous drainage:

A. Tranperitoneal
B. Transrectal
C. Transgluteal
D. Transvaginal
E. No route is safe
Case 7
What lab analysis is least helpful in this situation?

A. Hematocrit
B. Creatinine
C. Bacterial culture
D. Triglyceride level
E. Protein level
Case 7

Lymphocele Treatment

- Typically seen in setting of pelvic surgery
- Need to distinguish from seroma, urinoma, abscess, and hematoma
- Some lymphoceles respond to prolonged catheter drainage
- Many require sclerotherapy (e.g., Sotradecol, Betadine, tetracycline or absolute alcohol)
- Always perform contrast study beforehand to exclude communication with vital tissues and to assess cavity volume
- Multiple sclerosis procedures may be necessary
Case 8

The best treatment for this condition is:

A. IV antibiotics
B. Aspiration and culture
C. Percutaneous drainage
D. Operation
Case 9
What would you do next?

A. Proceed with nephrostomy placement
B. Remove needle and re-access collecting system
C. Inject air through the needle
D. Get CT scan
A 45 year old man with a staghorn renal calculus presents to IR for percutaneous nephrostomy to allow urologic treatment of the stone disease.

The patient suffers from obstructive sleep apnea and regularly uses a CPAP machine during sleep. In addition, he has a BMI of 42. Which form of sedation is most appropriate in this case?

A. No sedation at all, local anesthetic only
B. Minimal sedation
C. Moderate sedation by radiology nurses
D. Sedation/analgesia done by anesthesiology service
The patient is taking warfarin for treatment of pulmonary embolism that occurred three months ago. The INR today is 2.3. Which management approach is NOT advisable?

A. Proceed with procedure today
B. Give patient FFP to reduce INR to less than 1.8
C. Stop warfarin. Delay procedure about 2-3 days until the INR is within a safe range
D. Stop warfarin. Prescribe an anticoagulation bridge with enoxaparin

The patient notes that he has a severe allergy to shellfish. What step should be taken to avoid an allergic reaction to iodinated contrast material injected into the collecting system?

A. Use gadolinium-based contrast agent
B. Prescribe standard contrast allergy premedication regimen
C. Give dexamethasone 4 mg IV, wait 15 minutes, then proceed with procedure
D. Proceed with procedure without any pre-treatment
A 76 year old woman is referred to IR for a percutaneous liver biopsy to assess abnormal liver function tests. She is asymptomatic. The patient is taking clopidogrel 75 mg daily (following placement of coronary artery stents) and warfarin 5 mg per day (for a history of atrial fibrillation).

How should you manage clopidogrel therapy?
A. Discontinue drug for about 7 days and then perform procedure
B. Contact her cardiologist to discuss withholding the drug
C. Proceed with the procedure if the platelet count is >50,000/mm³
D. Administer a thienopyridine inhibitor and proceed with the procedure
E. Procedure is contraindicated in this patient

Her referring physician agrees that warfarin can be held to allow the biopsy to be performed. What is your target INR for safe conduct of the procedure?
A. INR < 1.0
B. INR < 1.2-1.4
C. INR < 1.6-1.8
D. INR < 2.0
Her cardiologist then calls and explains that she has a remote history of stroke while in atrial fibrillation and suggests an anticoagulation bridge. She also has a history of heparin induced thrombocytopenia. Which of the following statements is NOT true regarding HIT?

A. Arterial or venous thrombosis is actually quite uncommon in patients with HIT.
B. About 3% of individuals who receive unfractionated heparin products will develop thrombocytopenia.
C. The fall in platelet count typically occurs within 4 to 10 days of the start of heparin administration
D. Skin necrosis has been described in patients with HIT.

Which of the following agents would be most suitable in this patient for an anticoagulation bridge to discontinue warfarin?

A. Enoxaparin
B. Fondaparinux
C. Bivalirudin
D. Tinzaparin
The patient arrives one week later to have the procedure performed. The INR is 2.3. What to do you recommend?

A. Proceed with the biopsy
B. Infusion FFP 2 bags and recheck the INR
C. Infuse cryoprecipitate 0.2 bag/kg, no need to recheck INR
D. Administer vitamin K 5-10 mg IV once
E. Deliver prothrombin complex concentrate (PCC) at 30 IU/kg