TBL Exercises

#1. Consider the following scenario:

A 65 year old man presents with increasing fatigue. Laboratory examination shows a hemoglobin of 8.5 g/dl and a stool guaiac test is positive. On colonoscopy a polypoid mass is biopsied and a diagnosis of adenocarcinoma is obtained. The patient undergoes resection of the tumor.

Below are 4 multiple choice questions that could be asked that relate to this scenario. Which of the 4 questions would be considered most suitable as part of an NBME examination? (Note: Answer based on the structure of the questions, not specific knowledge about colorectal cancers.)

A. Which of the following statements is true about the therapy of colon cancer?
   a. Five year survival for patients with metastatic disease is better than 50%
   b. If the tumor is completely resected adjuvant therapy is not needed
   c. Patients with single hepatic metastases may be cured with surgical therapy
   d. Anti-EGFR antibody therapy is indicated for patients whose tumors have KRAS mutations.

B. Which of the pathologic features identified at the time of resection would be associated with the worst prognosis?
   a. Invasion of the tumor through the bowel wall
   b. High mitotic rate in the tumor cells
   c. Presence of tumor in a regional lymph node
   d. Invasion of blood vessels by the tumor

C. Each of the following is true about colon cancer EXCEPT
   a. Occult colon cancer should be considered in the differential diagnosis of iron deficiency in the elderly
   b. 5-FU containing regimens are used when adjuvant therapy is considered.
   c. A diagnosis of HNPCC should be considered in patients with a strong family history
   d. The incidence of colon cancer is higher in females than in males

D. Which of the following drugs would be most effective in treating this patient’s colon cancer?
   a. 5-FU
   b. Bevacizumab
   c. Erlotinib
   d. None of the above
#2 Consider the following scenario:

A 63 year old man with a history of coronary artery disease presents with acute chest pain. The patient has been experiencing occasional exertional chest pain for the past month, and the pain has been relieved with nitroglycerin and rest. On the day of admission, the patient was shoveling snow when he developed severe stabbing left lower chest pain without radiation that was similar to his typical chest pain, but he obtained no relief with sublingual nitroglycerin.

Working as a team, write one NBME-type multiple choice question that uses this as an item stem.