

- 1) MRI is useful in staging a patient with lung cancer?
  - A) When there is concern for involvement of the superior sulcus or brachial plexus involvement
  - B) When restaging of the mediastinum after neoadjuant treatment
  - C) When there is concern for involvement of lung parenchyma
  - D) When surrenal glands are to be detected
  - E) When contralateral lung has a suspicious solitary nodule
- 2) Which one of the following options you recommend to a patient with resected stage II and IIIA NSCLC?
  - a) Adjuvant radiotherapy
  - b) Adjuvant chemotherapy
  - c) Adjuvant chemoradiotherapy
  - d) No adjuvant therapy.
- 3) Which of the followings has not been changed in the new TNM staging system for lung cancer? D) T4 E) M
  - A) T1 B) T2 C) N1
- 4) In what situations pulmonary fungal infections not typically found?
  - A. Solitary pulmonary nodules
  - B. Organ transplant programs,
  - C. HIV positive patient with CD4 counts < 200
  - D. Patients with complications of tuberculosis carcinoma.
- 5) Which is NOT true for mediastinal goitre?
  - A) Most of the lesions can be resected via collar incision
  - B) Goitre is seen in only in anterior or middle mediastinum
  - C) Calcification is a common sign of mediastinal goitre
  - D) Vena cava superior syndrome is rare
  - E) Hypocalcemia may develop after the operation
- 6) Which is true regarding the medical errors?
  - A) the majority of cases amount from negligence or misconduct
  - B) It is a system problem, not a personal problem
  - C) Blaming the doctor who made an error would solve the problem in most cases
  - D) Cardiothoracic surgeons have the lowest inadvertent events when compared to other specialties
- 7) A 2-cm chest wall tumour in a patient with no known primary tumour elsewhere can be diagnosed best by
  - A) Needle biopsy B) Excisional biopsy C) Incisional biopsy D) MRI E) PET scan
- 8) For which liver hydatid cyst a thoracic surgeon (TS) is asked to operate?
  - A) Every liver hydatid cyst can be operated by a TS
  - B) Only those cysts that locate the lower liver surface
  - C) Cysts located on the dome of the liver
  - D) Every lung cyst associated with liver cyst should be operated by a TS
  - E) A TS should not operate any patient with liver cyst
- 9) What is the ideal treatment of malignant pleural mesothelioma (MPM)
  - A) Extrapleural pneumonectomy plus CT/RT
  - B) Pleurectomy-Decortication plus adjuvant treatment
  - C) Pleurectomy only
  - D) CT and or RT
  - E) There has been no ideal treatment found for MPM



- 10) Which of the situations define the T2 status according to IMIG staging system in MPM?
  - A) Parietal pleura invasion
  - B) Visceral pleura invasion
  - C) Lung parenchyma invasion
  - D) Pericardium invasion
  - E) Lobar bronchus invasion
- 11) Regarding the chest wall tumors?
  - A) Malignant tumors are more frequent than the benign tumors
  - B) Female and male are affected equally
  - C) Radiation is the main cause
  - D) All chest wall defects after resection should be closed by mesh
  - E) Leiomyosarcoma is the most frequent rib tumor
- 12) Which of the following approach is appropriate for the tumors located at the thoracic inlet?
  - A) Thoracotomy
  - B) Cervical incision
  - C) Cervical incision plus upper sternotomy
  - D) Cervical incision plus VATS
  - E) All of the above can be used
- 13) Which statement is correct regarding tuberculosis?
  - A. Lung surgery is frequently indicated for active tuberculosis
  - B. There is a correlation between lung cancer and previous tuberculosis
  - C. The presence of HIV precludes you for surgery for tuberculosis
  - D. Drug resistance for pulmonary tuberculosis is exclusively a '3<sup>rd</sup> world' disease
- 14) Mortality after intracavitary bullae drainage is particularly high in patients with FEV1:
  - A) Less than 800ml B) Less than 700ml C) Less than 500ml D) Less than 400ml
- 15) What is the most likely cause of cardiac arrest shortly after intubating and ventilating a patient with severe emphysema?
  - A) Misplacement of the double lumen tube
  - B) Poor gas exchange
  - C) Cardiac comorbidity
  - D) Air trapping leading to overexpansion and decreased venous return
- 16) What is the most common cause of failure of the lung to collapse after double lumen intubation
  - A) Bronchial balloon herniation
  - B) Tube placed too proximally
  - C) Tube placed into the wrong side
  - D) Tube placed too far distally into the bronchus
- 17) A strong risk factor for malignancy in a SPN is
  - A. Presence of calcium deposits in the lesion
  - B. Calculated doubling time of less than 30 days
  - C. A SUV of less than 2.5 on PET scan
  - D. A speculated border on CT scan
- 18) Most giant hiatal hernia patients should be treated by:
  - A) Reassurance without operation
  - B) Operation only in extreme situations
  - C) Elective operation if fit
  - D) Gastropexy



- 19) Measurement of DLCO preoperatively:
  - A) Is mandatory in all patients prior to lung resection
  - B) Gives additional risk information even in patients with FEV1>80% predicted
  - C) Is only necessary in the most borderline patients
  - D) Is decreasing is thoracic surgical practice in Europe
- 20) Calculated ppoFEV1 using the counting of segments method:
  - A. Is the most accurate way of assessing postoperative spirometry
  - B. Was developed in the 1970s
  - C. May significantly underestimate ppoFEV1 in patients with COPD
  - D. Accurately estimated ppoFEV1 in patients with COPD
- 21) Stereotactic radiosurgery:
  - A. Has been shown to have similar outcomes for lobectomy for Stage I NSCLC
  - B. Has challenged lobectomy by showing similar survival figures for early stage disease but failed to take account of nodal disease
  - C. Is the treatment of choice for metastatic disease
  - D. Is not affected by respiratory excursion
- 22) In N2 (single node) disease, what is the best treatment option?
  - a) Surgery
  - b) Preoperative chemotherapy followed by surgery
  - c) Surgery followed by adjuvant chemotherapy
  - d) Concomitant chemoradiotherapy without any surgical approach
  - e) b and c
- 23) The five year survival in most series following resection of solitary adrenal metastasis from early stage NSCLC:
  - A. Is 15%
  - B. Is 20-25%
  - C. Is less than 5% for synchronous metastasis rather than metastasis
  - D. Is prohibitively low to consider surgery
- 24) Patients who undergo surgery for solitary brain metastasis in NSCLC:
  - A. Should also have whole brain radiotherapy
  - B. Should have undergone mediastinoscopy to exclude N2 disease
  - C. Should undergo adjuvant chemotherapy to control microscopic metastatic disease
  - D. All of the above
- 25) The most difficult decision regarding palliative treatment of tracheobronchial obstruction is:
  - A. To define the risk for a borderline patients who could be made comfortable
  - B. To choose whether or not to stent
  - C. To decide on whether CT is appropriate or not
  - D. None of the above.
- 26) In the event of exsanguinating haemorrhage from an airway lesion during rigid bronchoscopy, the most efficient way of stopping the haemorrhage is:
  - A. Cryotherapy B) Laser therapy C) Platelet transfusion D) Inflation of a Fogarty embolectomy catheter in the bronchus.
- 27) Risk modelling:
  - A. Is essential for comparing outcomes between surgeons and units
  - B. Involves individual surgeons being prepared to contribute data
  - C. Is an important means of protecting borderline patients from being refused surgery
  - D. All of the above
  - E. None of the above



- 28) Which is the initial treatment of first primary spontaneous pneumothorax
  - a) Simple aspiration or small-bore chest tube if dyspnea or complete pneumothorax is present.
  - b) Simple aspiration or small-bore chest tube if less than 10%
  - c) Always videothoracoscopy
  - d) Chest drain and talc poudrage
- 29) Minimally invasive oesophagectomy:
  - A. Is an accepted standard treatment for resectable oesophageal cancer
  - B. Has an equivalent outcome to open surgery in terms of complications
  - C. Reveals low volume metastatic disease in 5-10% of properly staged patients
  - D. Takes the same time as open surgery
- 30) The gastric tube:
  - A. Is probably best constructed with an extracorporeal technique
  - B. Is probably best constructed with an intracorporeal technique
  - C. Is easily passed up the mediastinum laparoscopically
  - D. Does not need suturing to the crus to prevent herniation of other viscera
- 31) Regarding surgical mistakes:
  - A. Human error is the norm
  - B. Human error can be trained out of skilled technicians with practice
  - C. Human error must be punished
  - D. Human error must not be talked about or expected in surgery
- 32) When to send to surgery in primary pneumothorax?
  - a) a second ipsilateral pneumothorax
  - b) first contralateral or simultaneous bilateral pneumothorax
  - c) first episode of tension pneumothorax
  - d) significant spontaneous hemothorax
  - e) a high risk profession or activity
  - f) all of them
- 33) Please connect the 3 items related to the presence of Aspergillus in the chest:
- A) saphrophytic
- B) allergic
- C) opportunistic
- x) bronchopulmonary aspergillosis y) aspergilloma z) invasive aspergillosis
- 34) According to the International Registry, the current survival after lung transplantation approximates x % after 5 years:
- A) 75%
- B) 65%
- C) 55%
- D) 45%
- 35) The objectives of Lung Cancer Screening are
  - a) Resection of potentially curable lung ca.
  - b) Minimize resection of benign nodules.
  - c) Increase overall survival
  - d) Reduce costs in lung cancer treatment
  - e) a, b and c
- 36) The NETT found that the subgroup of patients with Upper Lobe predominant emphysema and low exercise capacity did the best
  - A) True B) False



- 37) Airway bypass involves making a hole through the bronchial wall (transbronchial fenestration) so as to allow communication between the airway and the emphysematous lungs
  - A) True B) False
- 38) Airway bypass takes advantage of collateral ventilation
  - A) True B) False
- 39) Increased levels of  $\beta$ -HCG and/or  $\alpha$ -FP are specific for the following mediastinal tumor:
- A) neurogenic B) thymic C) lymphoma D) germ cell
- 40) Increased levels of NSE are specific for the following mediastinal tumor:
- A) neurogenic B) thymic C) neuroendocrine D) germ cell
- 41) Serum AChR antibodies determination in the diagnosis of myasthenia gravis (MG)
- A) cannot be falsely positive
- B) excludes MG with negative test
- C) is sole antibody test in MG patients
- D) is the best diagnostic test
- E) may be falsely negative
- 42) Thymectomy in treatment of myasthenia gravis (MG)
- A) is document beneficial by phase III studies
- B) requires complete thymic removal for benefit
- C) is absolutely indicated with associated thymoma
- D) has proven superiority to medical therapy for MG crisis
- E) is indicated for ocular MG only if performed by MIS techniques
- 43) In esophageal cancer number of regional lymph node metastases
- A) carries a different prognosis depending on histopathologic cell type
- B) has historically been included in definition of N classification  $% \left\{ 1,2,...,N\right\}$
- C) in combination with histologic grade predicts survival
- D) is independent of T classification
- E) is inversely associated with survival
- 44) Modalities necessary in clinical staging of esophageal cancer include
- A) Endoscopic esophageal ultrasound
- B) Endoscopic esophageal ultrasound directed fine needle aspiration
- C) Esophagoscopy and biopsy
- D) FDG-PET
- E) All of the above
- 45) In the follow-up of curatively resected NSCLC
- A) Annual FDG PET scanning is mandatory.
- B) Blood tests reliably identify early recurrence.
- C) Chest radiographs are the best radiographic.
- D) Guidelines are well established.
- E) Lead time may account for reported survival differences.
- 46) A right middle lobe NSCLC is detected during follow-up of an asymptomatic patient who had a curative resection of a Stage IB adenocarcinoma of the right upper lobe 36 months ago. Resection of this NSCLC is
- A) associated with a 5-year survival similar to the previously resected cancer
- B) best accomplished using minimally invasive techniques
- C) likely to be curative
- D) possibly treating a second primary lung cancer
- E) unlikely to followed by distant metastases

# OF THORACK SURCE

- 47) An atypical carcinoid tumor of the lung is diagnosed by
- A) histologic review of the resected tumor
- B) history and physical examination
- C) FDG PET scanning
- D) presence of regional lymph node metastases (pN1)
- E) serum markers
- 48) A granular cell tumor of the esophagus
- A) arises from the 4<sup>th</sup> ultrasound layer of the esophagus
- B) has a high incidence of malignancy and distant metastases
- C) is diagnosed by esophagoscopy and biopsy
- D) is S-100 positive and thus derived from cell of the neural crest
- E) originates from cells of cajal
- 49) A typical symptoms of gastroesophageal reflux disease is
- A) abdominal bloating B) asthma C) cough D) laryngitis E) regurgitation
- 50) A predictor of good outcome following antireflux surgery is
- A) abnormal 24-hr pH monitoring
- B) atypical symptoms
- C) no symptom response to proton pump inhibitor (PPI) medication
- D) presence of Barrett esophagus
- E) short esophagus
- 51) The most frequently read part of a scientific publication is
- A) abstract B) discussion C) introduction D) methods E) title
- 52) Which modality of radiotherapy was shown to have the longest survival in the management of lung cancer?
- a. Concurrent chemoradiotreatment
- b. Sequential chemoradiotreatment
- c. HPF aks Radiotherapy
- d. HPF radiotherapy
- e. Radical radiotherapy
- 53) The referent value sensitivity is
  - A) accuracy of test divided by true positive patients
  - B) defined as number of patients correctly identified with disease divided by all patients with disease
  - C) defined as number of patients with disease compared to all patients with a positive test
  - D) useful in determining the value of a negative test
  - E) useful for individual patient decisions
- Bias may be introduced on the evaluation of a test if
- A) all patients undergoing the test don't have confirmation by gold standard
- B) negative pre-testing excludes patients from the test
- C) only patients of referring specialists and not family doctors are offered the test
- D) patients without health care are excluded from the test
- E) all of the above
- 55) Achalasia is diagnosed by
- A) barium esophagram
- B) esophageal manometry
- C) gastric emptying time
- D) history and physical examination
- E) 24-hr pH monitoring



- Heller myotomy and Dor fundoplication in the treatment of achalasia is
- A) Curative B) definitive C) indicated to prevent cancer D) palliative E) reparative
- 57) Complications following esophagectomy for esophageal cancer are
- A) associated with decreased survival
- B) over reported
- C) reported using accepted guidelines
- D) the result of technical errors of resection
- E) well defined
- 58) The following are early complications associated with GI reconstruction during esophagectomy
- A) aortic laceration B) chylothorax C) gastric necrosis D) recurrent nerve palsy E) tracheal laceration
- 59) Which of the following technique is used less commonly in surgical treatment of pulmonary hydatid cysts?
- A) Lobectomy B)
- B) Aspiration of the cyst
- C) Enucleation
- D) All three techniques are used equally
- 60) Which statement is correct about Diaphragm Trauma;
  - A. Diaphragmatic injuries are frequently missed
  - B. Left sided injuries are more lethal
  - C. Endoscopy is pivotal to diagnosis
  - D. Peripheral diaphragmatic injuries are most common
- 61) Which statement is true about blunt diaphragmatic injury;
  - A. Right sided rupture is more common
  - B. The colon is the most common herniated viscus
  - C. Aortic rupture is frequently associates
  - D. Rib fractures are often seen
- 62) Which statement is wrong regarding the diagnostic assessment of a tracheal injury:
  - A. the majority of injuries present with abnormal radiology
  - B. It is best is to evaluate the injury with a CT scan
  - C. possible associated injuries should be excluded in the diagnostic work up
  - D. bronchoscopy gives the best information about location and extent of the injury
- Which statement is correct about airway injuries?
  - A. All iatrogenic injuries can be treated conservatively
  - B. Most injuries to the main bronchi can be treated conservatively
  - C. Small Injuries to the anterior cervical trachea close with a conservative approach
  - D. Through and through stab wounds in the cervical trachea in general can be treated conservatively
- 64. What is not a common cause of bronchiectasis?
  - A. Childhood infection( whooping cough, measles)
  - B. Tuberculosis
  - C. Overlooked foreign body inhalation
  - D. Trauma
  - E. Cystic fibrosis
- 65. Which statement about empyema is true
- A. Anaerobes are commonly culture in post traumatic empyema
- B. Tuberculosis related effusions often culture gram negative organisms
- C. Staphylococcus is a frequent pathogen in the debilitated patient
- D. Drainage in peripneumonic effusions is always indicated



- 66. What would not be a general indication of drainage or surgery in a parapneumonic effusion
- A. Frank purulent or turbid/cloudy pleural fluid
- B. The presence of organisms identified by Gram stain or culture from non-purulent pleural fluid
- C. pH of aspirate = 7.4
- D. Multiple locultion with air-fluid levels on CT scan
- 67. Which is incorrect about oesophageal injury?
  - A. It is common in stab wounds to the back
  - B. It is uncommon with routine flexible gastroscopy
  - C. It may present with surgical emphysema in the neck
  - D. It should be suspected of heavy vomiting followed by chest pain
- 68. Which is not a common presentation of Aspergillus infections
- A. Saprophytic (aspergilloma)
- B. Allergic (Non-invasive bronchil)
- C. Mediastingal (Sclerosing)
- D. Invasive Aspergillosis (opportunisitic)
- 69. Which statement is true for penetrating chest injuries
- A. 'Bullet proof' vests are highly effective for all forms of firearms
- B. A very important factor in shotgun wounds is the distance from the weapon
- C. Military weapons and hunting rifles use the same munitions
- D. The lung is less tolerant of high velocity wounds than soft tissue or liver
- 70. Which statement is false for penetrating chest injuries
- A. Oversewing of the visceral pleura of lung wounds is sufficient for most penetrating wounds
- B. Air embolism is an important factor in the morbidity of lung injuries
- C. High velocity wounds can injure organs without penetrating them
- D. The incidence of gunshot wounds parallels the incidence of ownership in the general population
- 71. Variables for a Bayesian probability analysis in SPN evaluation do not typically include
- A. Lung perfusion scan
- B. Smoking history
- C. Geographic locale
- D. Radiological appearance
- 72. Which patient is the most suitable candidate for endobronchial treatment and stenting?
  - a. Benign tracheal stenosis
  - b. Tracheomalacia
  - c. Endobronchial tumor obstructing carina
  - d. Malignant tracheoesophageal fistula
  - e. Benign tracheoesophageal fistula
- Which one is a definitive indication for a segmentary resection?
  - f. Metastasectomy
  - g. Lung cancer
  - h. Bronchiectasis
  - i. Lung cancer with N2
- j. Lung cancer smaller than 3 cm
- 74. In a bronchiectatic patient with massive haemoptysis who has bilateral disease, optimum management is ...?
- a. Resection of diseased segments
- b. Endobronchial treatment with ice
- c. Embolisation
- d. Resection of the bleeding lobe
- e. Intubation and wait