

系級	科目	授課教師	考試日期	學號	姓名
醫四	影像診斷科	醫師86119 陳榮邦	90年6月19日第一節		

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單選題

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1. A patient was suspected to have hepatocellular carcinoma rupture. The most appropriate treatment is (A) emergent surgery (B) emergent transhepatic arterial embolization (TAE) (C) conservative treatment (D) PTC.
2. A 51 years old male with a liver tumor. He is a victim of chronic B hepatitis. The tumor shows peripheral halo sign, bulging sign, and nodule in nodule sign in ultrasound. The most possible diagnosis is (A) metastatic liver tumors (B) hemangioma ((C) hepatocellular carcinoma (D) liver cyst
3. What's the characteristic ultrasonographic findings in a liver cyst? (1) anechoic (2) posterior enhancement (3) clear margin (4) target sign (A) 1+2 (B) 1+2+3 ((C) all of the above (D) none of the above.
4. The ultrasonographic sign in acute calculus cholecystitis are (1) GB distention (2) positive echo-Murphy sign (3) GB wall thinning (4) GB stones (A) 1+2 (B) 1+2+3 ((C) 1+2+4 (D) 2+4
5. The echo finding in acute pancreatitis are the followings, except (A) shrinkage pancreas (B) hypoechoic change of parenchyma ((C) peripheral phlegmon formation (D) pancreas may normal in mild cases.
6. The ultrasound including (1) real-time ultrasound (2) Color Doppler ultrasound (3) Contrast enhanced ultrasound (4) endoscopic ultrasound (A) 1+2+3 (B) 1+2+4 ((C) 2+3+4 (D) all of the above
7. Which imaging procedure can provide noninvasive, alternative to direct cholangiography in evaluation of patients with failed ERCP? (A) MRCP (B) PTC (C) CO2-sonogram (D) spiral CT
8. The intensity of echogeneity are (A) calcification>liver parenchyma>cyst (B) bone>cyst>splenic parenchyma (C) kidney>bone>cyst (D) normal renal parenchyma>normal liver parenchyma.
9. Additional linear echoes parallel to skin seen posterior to skin was (A) mirror imaging artifact (B) acoustic shadow (C) posterior enhancement (D) reverberation artifact.

臺北醫學大學 89 學年度第 二 學期 期中 考試 命 題紙

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10. The differential diagnosis of splenomegaly included (1) lymphoma (2) liver cirrhosis (3) liver hemangioma (A)1 (B) 1+2 (C) 1+3 (D) all of the above.
11. Bone tissue (e.g., cortical bone) in an MR image usually appears dark. This is because:
 - (A)The static magnetic field is unable to penetrate the bone;
 - (B)The RF pulse is unable to penetrate the bone;
 - (C)Bone does not have many water molecules to produce detectable signal;
 - (D)The injected isotope never reaches the bone.
12. Choose the single incorrect statement:
 - (A)Clinical high-field MRI systems often use superconducting electromagnets to achieve system stability;
 - (B)The versatile contrast such as T1, T2, or molecular diffusion makes MRI very powerful in providing lots of diagnostic information;
 - (C)The flexible use of obtaining section slices in any desired orientation is one advantage of MRI;
 - (D)MRI is able to replace X-ray because MRI provides so many functions in a tomographic manner.
13. Which one of the following statements about urolithiasis is incorrect?
 - (A) Most cases of urolithiasis are radiolucent stones. (B) The urographic finding of radiolucent stones in IVU is filling defect. (C) IVU can evaluate the anatomic and functional changes of the upper urinary tract. (D) Radiopaque stones can cast a shadow in plain KUB.
14. Which one of the following diseases causes fish-hook appearance of the distal end of bilateral ureters more often?
 - (A) Carcinoma of urinary bladder. (B) Chronic cystitis. (C) Schistosomiasis of urinary bladder. (D) Benign prostatic hyperplasia.
15. Which one of the following statements about adenocarcinoma of prostate is incorrect?
 - (A) About 70% cases occur in the transitional zone. (B) Carcinoma presents low signal lesion in T2-weighted images. (C) Stage A or B carcinoma occurs in the transitional zone more often. (D) It usually produces osteoblastic bony metastasis.
16. Which one of the following diseases is more often associated with tuberous sclerosis?
 - (A) Renal cell carcinoma. (B) Renal angiomyolipoma. (C) Renal oncocytoma. (D) Renal lymphoma.
17. Renal cell carcinoma with adjacent psoas muscle invasion, what is its tumor staging?
 - (A) Stage III A. (B) Stage III B. ((C) Stage IV A. (D) Stage IV B.

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18. Which one of the following disease often has multicentric characteristic?
 (A) Adenocarcinoma of prostate. (B) Renal cell carcinoma. (C) Transitional cell carcinoma of kidney. (D) Nonfunctioning adrenal cortical carcinoma.
19. Adrenal metastases most come from:
 (A) Carcinoma of bronchial system. (B) Adenocarcinoma of prostate. (C) Transitional cell carcinoma of urinary bladder. (D) Endometrial carcinoma.
20. Congenital anomaly of uterus is usually associated with which of the following diseases:
 (A) Horse-shoe Kidneys. (B) Renal agenesis. (C) Complete duplication of upper urinary tract. (D) Crossed ectopic kidney.
21. What is the most useful role of PET scan in the field of Nuclear Medicine?
 (A) Neurologic disorders; (B) Cardiac disorders; (C) Oncologic disorders; (D) Metabolic disorders.
22. Which of the following disease will not show cost-effectiveness with PET scan?
 (A) breast cancer; (B) lung cancer; (C) head and neck cancer; (D) melanoma.
23. For coronary re-stenosis, which radioisotope can be used to prevent it?
 (A) Tc-99m; (B) I-131; (C) F-18 (D) Rh-188.
24. A new radiopharmaceutical for Parkinson's disease imaging, Tc-99m TRODAT-1, is used for imaging:
 (A) dopamine synthesis; (B) dopamine transporter; (C) dopamine receptor; (D) D2 receptor;
25. Suppose a tumor will uptake Tc-99m MIBI as tumor imaging, we can assume:
 (A) there is p-glycoprotein on the surface of the tumor cell membrane;
 (B) there is no p-glycoprotein on the surface of the tumor cell membrane;
 (C) neither (a) or (b) is correct;
 (D) there is no correlation between MIBI uptake and p-glycoprotein.
26. The right lung has X segments and the left lung has Y segments.
 (A) X=10, Y=10 (B) X=8, Y=8 (C) X=10, Y=8 (D) X=8, Y=10
27. Which artery is not arised from aortic arch?
 (A) Right subclavian artery (B) Left subclavian artery (C) Brachiocephalic artery (D) Left common carotid artery
28. Which of the following statement is wrong?
 (A) Right hilum is higher than left; (B) Left hilum is higher than right. (C) Some time both hila are on the same level. (D) None of all.
29. Absolute contraindication of MR imaging for patients with which of the following material?
 (A). breast augmentation (B). IUD (C) Pacemaker (D). Foreign body in the orbit

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30. MRI 之影像成像原理，下列何者正確？
 a. 信號愈強，影像愈白 b. 信號愈強，影像愈黑 c. T1WI 中，T1 愈長，影像愈白
 d. T1WI 中，T1 愈長，影像愈黑
 (A) a (B) d (C) b, c (D) a, d (E) a, c
31. 據新國際標準規定，職業曝露輻射劑量限制應為每年全身小於50mSV。請問學齡前幼兒其劑量應低於多少？
 (A) 15mSV (B) 5mSV (C) 25mSV (D) 0.5mSV
32. 某未婚女性至健檢中心接受Chest及KUB各一張X光片，事後才證實受檢當時已懷孕五週，請問以專業知識判斷，下列何者正確？
 (A)建議病人墮胎 (B)不需採取任何措施
 ((C)無法確定對胚胎有否傷害 (D)孕婦會患白血病
33. 病灶在MRI影像之T1W和T2W波序皆顯示低訊號時，應考慮：
 (A)Calcification, hemosiderin, flow (B) Air, metallic substance (C) Fat, water
 (D) (A)+(B)
34. 病人2年前患直腸癌，經手術及放射治療後追蹤至今，三天前局部背痛愈來愈嚴重，MRI發現疑似L₃，L₃椎體病變及周圍組織浸潤，無法鑑別炎症或轉移癌，最合理的下一步驟應如何？
 (A)立即做Radiotherapy (B)手術切除 (C) CT-guided Biopsy (D) Anti-TB treatment
35. 據台大醫院研究結果，建議國人肝細胞癌篩檢之對象？ b. 工具？ c. 時間間隔？ 依序為
 (A)a. B型肝炎帶原者 b. 血液 Alfa-fetoprotein c. 每月一次
 (B) a. 肝硬化病人 b. 超音波檢查 c. 每年一次
 (C) a. 肝硬化病人或肝細胞癌家族史病人 b. 超音波檢查 c. 每4-5個月一次
 (D) a. B型肝炎帶原者 b. 血液Alfa-fetoprotein及超音波檢查 c. 每半年一次
36. 'TNM' 癌症分期，a. 'T' b. 'N' c. 'M' 分別為：
 (A) a. 組織學診斷 b. 局部淋巴轉移 c. 遠端轉移
 (B) a. 腫瘤範圍 b. 腫瘤壞死程度 c. 遠端轉移
 (C) a. 腫瘤範圍 b. 局部淋巴轉移 c. 遠端轉移
 (D) a. 組織學診斷 b. 經淋巴轉移 c. 經血液轉移
37. The reduction of mortality rate of lung cancer is not remarkable even in those people having regular health exam. by chest film annually. The current concept of imaging modality for screening high risk people can be?
 (A)low-dose spiral CT (B) MRI (C) sonogram (D) angiography
38. 頸部淋巴結之癌病轉移最specific之signs為？
 a. 淋巴結短軸 $\geq 1.2\text{cm}$ b. 三個以上成群之淋巴結 c. 淋巴結中央壞死 d. 長軸 $\geq 1\text{cm}$
 (A)a+b (B) a+b+c (C) b+c+d (D) a
39. 一名29歲女性求診主訴自我觸診發現右乳房有一柔軟腫塊，約2cm。請問下一步最合適之檢查為？
 (A) Breast sonogram (B) Mammography
 (C) 腫塊切除(lumpectomy) (D) Biopsy
40. 一名59歲女性求診主訴自我觸診發現右乳房有一2cm之硬塊。下一步最合適之檢查為？
 (A) Breast sonogram (B) Mammography
 (C) 腫塊切除(lumpectomy) (D) Biopsy
41. 一病人經術前超音波偵檢出3cm肝腫瘤，切除後第一次之追蹤檢查為Liver sonogram，請問往後之追蹤必需包括？
 (A) MRI (B) CT (C) Angiography (D) Sonogram

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42. 一名40歲男性主訴右側耳後有一 2公分結節，請問最合理的下一步檢查為：
 (A) Biopsy (B) Anti-TB 治療 (C) Sonogram (D) 請 ENT 醫師作詳細檢查，尤其鼻、咽部份。
43. 子宮頸癌 Staging，最正確的方法為：
 (A) 指診 only (B) MRI only ((C) 指診+CT (D) 指診+ MRI
44. 下列栓子何者可為人體吸收：
 (A) Ivalon (B) Silicon ball (C) gelfoam (D) spring coil
45. 下列敘述何者為真：
 (A) 肝細胞與肝癌的氧氣供應均源自肝動脈
 (B) 肝細胞的氧氣供應主要源自門脈，肝癌的氧氣供應主要源自肝動脈
 (C) 肝細胞的氧氣供應主要源自肝動脈，肝癌的氧氣供應主要源自門脈
 (D) 肝細胞與肝癌的氧氣供應均源自門脈
46. 下列有關以 TAE 治療肝癌的敘述何者為非：
 (A) 以 TAE 治療肝癌可以消滅肝內所有肝癌細胞， (B) 臺灣的肝癌病人往往合併肝硬化，故以 TAE 治療肝癌時應先明瞭門脈的情況， (C) Child C 的肝癌病人不宜以 TAE 治療肝癌， (D) 以 TAE 治療肝癌後數日內會有肝機能異常現象。
47. 當胸部 X 光片上出現“錢幣狀”病灶(coin lesion)時，下列何者為偵測的第一步驟？
 (A) 設法取得以前的 X 光片並比較之 (B) 支氣管攝影術(Bronchography) (C) 用螢光透視或低伏壓 X 光取像 (D) 傳統斷層攝影(conventional tomography)
48. Pneumonia 的 X 光片表徵：
 (A) Alveolar infiltrates(Air-space filling) (B) Interstitial infiltrates (C) nodular lesion (D) none of the above
49. Elevation of hemidiaphragm 可能原因：
 (A) normal eventration (B) 同側 lung collapse (C) 同側 phrenic nerve paralysis (D) All of the above
50. 小於 1mm 的 lesion 稱為：
 (A) Reticulonodular (B) Miliary (C) Nodular (D) Alveolar
51. Nodular lesion 是指：
 (A) $\leq 1\text{mm}$ (B) $\leq 10\text{mm}$ (C) 1至3cm (D) $> 3\text{cm}$
52. 在 chest film 顯示 lung nodule 的形狀如下，請問可能診斷為：

 (A) Hamartoma (B) Lung cancer (C) TB granuloma (D) Metastasis
53. Chest PA film 可見一病灶與 Left heart border 介面不清，請問病灶是在 heart 的：
 (A) 前方 (B) 同一水平位置 (C) 無法判斷相關位置 (D) (A)+(B) 皆對
54. MRI can be superior to CT scan in evaluation of patients with advanced stage of NPC in
 (A) parapharyngeal spaces (B) skull base (C) nasal cavity (D) sphenoid sinus
55. The nipples are usually in the _____ rib spaces (intercostal spaces) on Chest PA film. (A) 10th anterior (B) 10th posterior (C) 5th anterior (D) 5th posterior
56. On a good inspiration chest PA film, the level of right hemidiaphragm is nearly the anterior end of the _____ rib, the right hemidiaphragm is being up to _____ cm higher than the left. (A) 6th, 2.5 (B) 10th, 5 (C) 10th, 1 (D) none of the above
57. Which fissure can be seen on chest PA film?
 (A) horizontal (minor) fissure (B) oblique (major) fissure
 (C) A + B (D) vertical fissure