

一〇九年度解剖病理專科醫師甄試 實地測驗(解剖)試題

姓名 _____

准考證號碼 _____

1. Hx: 52y male, abdominal pain post appendectomy

Ans: goblet cell adenocarcinoma

2. Hx: 50y male, lung mass

Ans: Pneumocystis Jiroveci pneumonia

3. Hx: 52y male, sudden death post autopsy

Ans: giant cell myocarditis

4. Clinical data: A 28-year-old female suffered from sudden onset of left upper arm pain. Radiography showed multiple moth-eaten osteolytic lesions over diaphysis of left humerus shaft. Operation intervention for diagnosis and treatment was performed.

Slide: HE section

Question: What is the diagnosis?

Ans: Rosai-Dorfman disease

5. Clinical data: A 67-year-old male complained of left inguinal pain. The imaging showed a huge retroperitoneal mass with infiltration of left spermatic cord. He received an excision of left spermatic cord mass. The molecular studies showed single hit with *IGH/MYC* fusion but no translocations involving *BCL2* or *BCL6*.

Slide: HE section

Question: What is the diagnosis?

Ans: Burkitt lymphoma

6. Clinical data: A 58-year-old male complained of fresh bloody stool for 10+ days. A colonoscopic examination showed an ascending colon tumor and a biopsy specimen showed malignancy. He later received laparoscopic right hemicolectomy.

Immunohistochemically, the tumour cells are positive for EMA and CD30, but negative for LCA, PAX-5, CD79a, CD56, CD4, CD8, CD5, TIA1, granzyme B, ALK,

and HHV8 stains.

Slide: HE section, EBER in situ hybridization

Question: What is the diagnosis?

Ans: Plasmablastic lymphoma

7. Clinical information: 71 yr male, RML lung mass, 3.4 cm, lobectomy

Slide: HE slide

Question: What is the diagnosis? Please give the histology type and percentage.

Ans. Adenocarcinoma, with 4 patterns (要寫到 micropapillary pattern)

8. Clinical information: 31yr, male with mediastinal mass, resection

Slide: HE slide

Question: What is the diagnosis and its WHO classification

Ans. Thymoma, type AB

9. Clinical information: 40 yr male, cough and exertion dyspnea, multiple tumors in bilateral lower lobes found by CT scan.

Slide: HE slide

Question: What is the diagnosis?

Ans. Cryptococcus infection

10. Clinical data: An eleven years old boy had a right post-auricular mass for 1 year. Operation showed a 2 cm tumor in the superficial lobe of the parotid gland.

Slide: HE slide

Question: What is the diagnosis?

Ans: Mucoepidermoid carcinoma

11. Clinical data: A 39-year-old woman had frequent right epistaxis and nasal obstruction for 1 month. Nasopharyngoscope showed a soft tissue tumor arising from right middle turbinate with necrotic debris. Head and neck CT scans showed one enhanced mass measuring 2x1.5 cm in the right nasal cavity. Tumor excision was performed.

Slide: H&E-stained slide

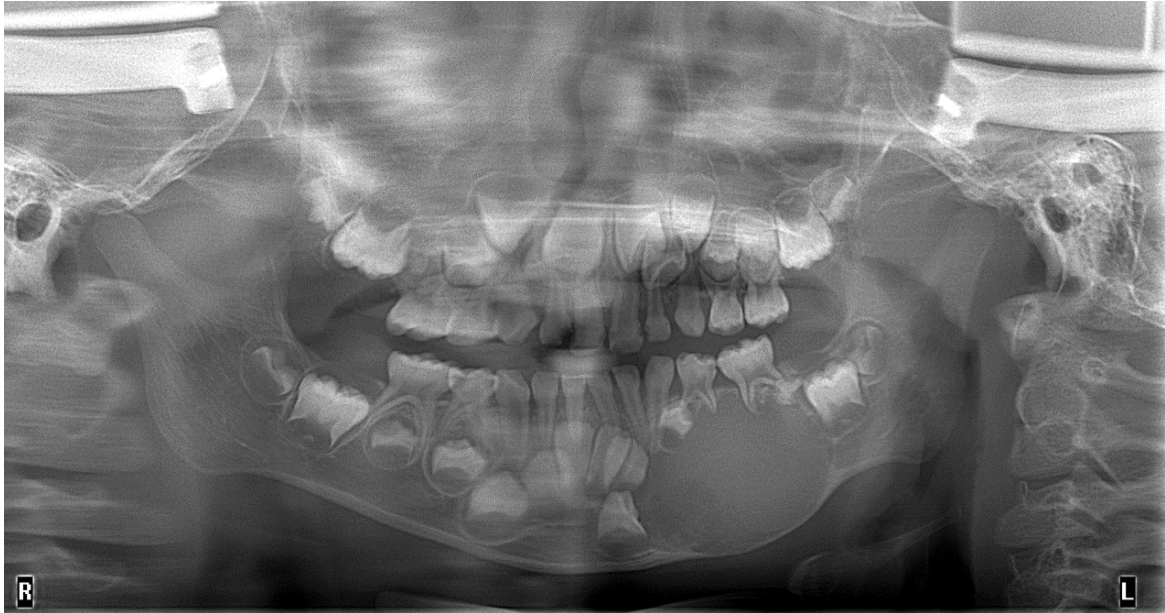
Question 1: What is the diagnosis?

Question 2: How to confirm your diagnosis?

Ans: (1) HPV-related multiphenotypic sinonasal carcinoma; (2) IHC using p16 or ISH using HPV RNA

12. Clinical data: A 4-year-old boy accompanied with his parents complained of a painless swelling at left lower posterior region for 4 months.

Radiographic finding: A panoramic x-ray attached below.



Slide: H&E-stained slide

Question: What is the diagnosis?

Ans: Juvenile ossifying fibroma (psammomatoid variant)

13. Clinical data: A 59-year-old woman, G1P1, presented with bilateral ovarian tumors. Bilateral oophorectomy was performed.

Material description: The right ovarian mass measured 8 x 7.2 x 5 cm, and the left ovarian mass measured 12 x 10 x 10 cm in size, respectively, with smooth external surface. The sectioned surfaces of both tumors are solid and cystic with necrotic and bloody contents.

Slide: H&E-stained section from left ovary tumor

Question:

(1) What's your diagnosis?

(2) Which set of immunohistochemical staining results is most likely for this tumor ?

A. CK7(-), CK20(+), SATB2(+)

B. CK7(+), CK20(+), SATB2(-)

C. CK7(+), CK20(-), PTEN (-)

D. CK7(+), CK20(-), p53(+, mutataional type)

Ans: (1) Metastatic colorectal adenocarcinoma; (2) A

14. Clinical data: A 69-year-old woman, postmenopausal abnormal uterine bleeding.

Endometrial curettage was performed.

Slide: H&E-stained section of endometrial curettage

Question:

1. Please describe suspicious findings that you wanted to call the clinician's attention to do further survey.
2. List one immunohistochemical stain that you thought most helpful in supporting your suspicion.

Ans: (1) Atypical epithelial strips, highly suggestive of serous type lesion; (2) p53

15. Clinical data: A 33-year-old woman, G0P0, with abnormal uterine bleeding.

Hysteroscopic examination showed a broad-based polypoid mass. Under the impression of submucosal myoma, hysteroscopic myomectomy was performed.

Material description: Multiple myomatous fragments were submitted.

Slide: H&E-stained section from the polypoid uterine mass.

Question:

1. What's your diagnosis?

Ans: Atypical polypoid adenomyoma / Atypical polypoid adenomyofibroma

16. A 42-year-old male presenting with a nodular tumor in the muscle near the elbow joint.

HE x 1, BRAF IHC x1

(a) What of the following immunohistochemical makers is most likely positive in this case?

- (A) HMB45
- (B) DOG1
- (C) SMA
- (D) PAX8

(b) What is the diagnosis of this case?

Ans: (a) C; (b) Glomus tumor of uncertain malignant potential

17. A 44-year-old male presenting with a 5.9 cm tumor in the upper pole of the right kidney. HE x 1

(a) What of the following immunohistochemical makers or genetic aberration is most likely positive in this case?

- (A) ERG
- (B) GATA3
- (C) PAX8
- (D) *GNAQ* Q209H mutation

(b) What is the diagnosis of this case?

Ans: (a) A; (b) Angiosarcoma

18. A 4-year-old female presenting with an infiltrative lesion of the left femur with prominent soft tissue extension. HE x 1, plain film and MRI



(a) What of the following immunohistochemical marker or molecular testing is most diagnostically useful in this case?

- (A) SATB2
- (B) *FOXO1* break-apart FISH
- (C) cyclin B3 immunohistochemistry
- (D) *EWSR1* break-apart FISH

(b) What is the diagnosis of this case?

Ans: (a) D; (b) Ewing sarcoma

19. Clinical Data: (本題送分)

A 1-year-10-month boy suffered from severe portal hypertension with recurrent esophageal and gastric varices, ascites, and right pleural effusion. Living donor liver transplantation was performed after admission. The native liver was sent for pathological examination.

Slide: H&E slide of native liver

Question: 1. What is your pathological diagnosis ?
2. What are the two major diagnostic histopathological features ?

Ans: (1) Hepatosclerosis; obliterative portal venopathy; non-cirrhotic portal Fibrosis; idiopathic portal hypertension
(2) 1. Portal vein abnormalities
2. Bridging fibrosis between portal areas without hepatic cirrhosis

20. Clinical data: A 50-year-old man had a left infra-auricular tumor for 2 years. Its size progressively enlarged and MRI revealed a well enhanced tumor measuring 2.5 x 2.0 cm without neck lymphadenopathy.

Slide: H&E-stained slide

Question: What is the diagnosis?

Ans: Epithelial-myoepithelial carcinoma

21. A 59-year-old women with a gastrointestinal stromal tumor in the cardia and underwent post proximal gastrectomy with esophago-gastrostomy anastomosis. Unfortunately, it is complicated with esophageal fistula and bilateral empyema and respiratory failure. Abnormal liver function test was noted and liver biopsy was conducted.

Slide: HE

Question: (1) What's your diagnosis?

(2) What are the most possible etiologies?

Ans: (1) Cholangitis lenta; (2) Sepsis (and others, 要寫到 sepsis 才會滿分)

22. A 42-year-old female HBV carrier. A 2.6 cm liver mass was found and biopsied.

Slide: HE

Question: What's your diagnosis?

Ans: Angiomyolipoma

23. This is a 53 year-old male with hypertension and diabetes mellitus for 17 years. In this year, sinusitis and pancreatitis were noted for several months. What is the diagnosis for the renal biopsy specimen? Please write down three differential diagnoses.

Slide: HE slide, Masson's trichrome, PAS, CSM.

Question:

What's your diagnosis (you can list up to 3 differential diagnosis)?

Ans: IgG4-related tubulointerstitial nephritis

24. Write a report for this case..

Ans: cystitis cystica et glandularis with squamous metaplasia

25. 1. Write a report for this case.

2. List one most helpful positive immunostain to support the diagnosis.

Ans: (1) clear cell papillary renal cell carcinoma; (2) CK7

26. Write a report for this case.

Ans: adenocarcinoma, Gleason score: 3+4 at least

27. Clinical data: A 57 y/o female received wedge resection of an incidentally found gastric tumor.

Slide: H&E

Question: What is your diagnosis?

Answer: gastritis cystica polyposa / gastritis cystica profunda

28. Clinical data: A 49 y/o female received colonoscopy examination with biopsy over rectosigmoid junction.

Slide: H&E

Question: What is your diagnosis?

Ans: parasite ovum / ovum of Schistosoma japonicum

29. Clinical data: A 32 y/o man had bloody stool and received colonoscopic biopsy from rectal ulcer.

Slide: H&E

Question: What is your diagnosis?

A. _____

B. _____

Ans: CMV(cytomegalovirus) infection; cryptosporidium infection

30. Clinical data: A 56 y/o woman received excision for a breast tumor.

Slide: HE slide

Question: What is the diagnosis?

Ans: Invasive carcinoma with mucin production

31. Clinical data: A 68 y/o woman received excision for a right breast tumor.

Slide: HE slide

Question: What is the diagnosis?

Ans: Ductal and lobular carcinoma in situ with microinvasion

32. Clinical data: A 70 y/o woman had received needle biopsy for breast papilloma one month ago. Vacuum assist tumor excision was performed.

Slide: HE slide, IHC stain for p63

Question: What is the diagnosis?

Ans: Florid epithelial hyperplasia and epithelial displacement

33. Clinical data: A 71 y/o man with a nodule on his right upper chest. Tumor excision was performed.

Slide: HE slide

Question: What is the diagnosis?

Ans: spiradenoma

34. Clinical data: A 43 y/o man presented with recurrent painful oral ulcers for 2+ years. Several crusted erosions were also noted on the trunk. Biopsy was performed. A systemic workup did not identify underlying associated diseases.

Slide: HE slide and direct immunofluorescence images

Question: What is the diagnosis?

Ans: pemphigus vulgaris

35. Clinical data: A 49 y/o man with several erythematous nodules at bilateral hands. Biopsy was performed.

Slide: HE slide

Question: What is the diagnosis?

Ans: granuloma annulare

36. Clinical data: A 2-year-old boy with an enhanced mass and hydrocephalus in the posterior fossa. Craniotomy and resection of the tumor were performed.

Slide: HE slide, IHC slides

Question: According to the 2016 WHO CNS tumor classification, what is the most possible histologically and genetically defined diagnosis?

Ans: Medulloblastoma, large cell/anaplastic, SHH-activated and TP53-mutant, WHO grade IV

37. Clinical data: A 30-year-old male with partial complex seizure and left hippocampal tumor. Excision of the tumor were performed.

Slide: HE slide

Question: What is the most possible diagnosis?

Ans: Dysembryoplastic neuroepithelial tumor

38. Clinical data: A 67-year-old male with a sellar mass. The immunohistochemical study showed immunoreactivity for SF1 and negative for PIT1 and TPIT.

Slide: HE slide, IHC slide

Question: According to the 2017 WHO classification, what is the most possible diagnosis?

Ans: Gonadotroph adenoma

39. Clinical Data: A 10-year-old girl with thyroid tumor measures up to 6.0 cm in greatest dimension. Total thyroidectomy was performed.

Slide: H.E. slide

Question: What is the diagnosis?

Ans: Spindle epithelial tumor with thymus-like differentiation

40. Clinical Data: A 60-year-old female suffered from left neck mass noted for 2-3 month. Thyroid sonography showed a heterogenous nodule at left thyroid lobe (size: 5.0 cm). Total thyroidectomy was performed.

Slide: H.E. slide

Question: What is the diagnosis?

Ans: Hashimoto thyroiditis with MALT lymphoma