

HKCPath Anatomical Pathology QAP 2007 Round 2

code	case	diagnosis	comment	score
246	AP212	Gastrointestinal stromal tumor (with possible post-Gleevac effect). 80% DDX: Schwannoma. 20%	More clinical history should be given in the first place! Is there a history of previous GIST? Treatment? The Dx of GIST is confirmed with +ve immunostains (CD117 & CD34) while S-100 protein positivity would be more in favour of a schwannoma.	20
448	AP212	TREATED GASTROINTESTINAL STROMAL TUMOUR -100%	nil	10
369	AP212	Desmoplastic small round cell tumor.(100%)	Can do cytokeratin, vimentin, desmin and WT1 stains to help diagnosis. Or do RT-PCR for EWS-WT1 fusion gene transcript to confirm diagnosis.	100
515	AP212	Malignant small blue cell tumour ddx: Neuroblastoma (70%), Ewing's sarcoma/PNET (20%), malignant melanoma (<10%), rhabdomyosarcoma (<10%), small cell carcinoma (<10%)	Perform immunohistochemical stain NSE, synaptophysin, chromogranin, neurofilament, CD 99, S-100 protein, HMB 45, BCK, desmin, myoglobin, myogenin	60
338	AP212	Small blue round cell tumor, consistent with intra-abdominal desmoplastic small round cell tumor 70%, ddx: small cell carcinoma 30%.	Confirm by CK+, NSE+, desmin+, SMA-, EWS-WT1 protein+. For small cell ca, CK+(punctate perinuclear), chromogranin+, synaptophysin+. Immunostains for other remote ddx eg. lymphoma, undifferentiated ca and	100

			melanoma(pigments+).	
873	AP212	Dx: small cell tumor. DDx: desmoplastic small round cell tumour and small cell carcinoma. Will perform epithelial, neuroendocrine and muscle marker. 100% Probability	nil	80
222	AP212	Malignant neurogenic tumor: Melanotic neuroectodermal tumor (50%). Neuroblastoma (50%)	nil	50
530	AP212	Schwannoma with presence of melanin and cellular area	nil	10
109	AP212	Malignant small round cell tumour, favour desmoplastic small round cell tumour (100%)	Tumour cells may be positive for CK, Desmin, EMA, vimentin and NSE.	100
517	AP212	Intra-abdominal desmoplastic small round cell tumour 100%	nil	100
911	AP212	Small round cell tumor, favour desmoplastic small round cell tumor (100%)	Immunohistochemical staining for AE1/AE3, EMA, NSE, desmin, SMA, LCA.	100
333	AP212	Desmoplastic small round cell tumor, 100%.	Confirm by immunohistochemical studies (cytokeratin, desmin and neurone specific enolase all positive.	100

888	AP212	Intra abdominal desmoplastic small round cell tumor. 100%.	t(11, 22) (p13: q12) cytogenetic finding for confirmation	100
663	AP212	Infiltration by malignant small round cell NEOPLASM	The histologic differential diagnoses include desmoplastic small round cell tumour, gastrointestinal stromal tumour and lymphoma. Immunohistochemical stains like desmin, cytokeratin, NSE, CD34, c-kit and lymphoid markers are suggested for reaching a definitive diagnosis. The hyaline degeneration of subserosa and subserosal vessels is not typical and secondary changes like treatment effect induced by radiotherapy or chemotherapy needs to be considered.	60
763	AP212	Small cell tumor	The differential diagnoses include primitive neuroectodermal tumor, desmoplastic small round cell tumor, small cell melanoma and small cell carcinoma. Suggest performing immunohistochemical study to differentiate - PNET would be positive for CD99, DSRCT for CD99, cytokeratin and smooth muscle markers, melanoma for S100 and HMB45, and small cell carcinoma for CAM5.2.	60

448	AP213	Thigh SOFT TISSUE tumor - DERMATOFIBROSARCOMA PROTUBERANS 100%	nil	90
246	AP213	Fibrosarcoma arising from dermatofibrosarcoma protuberans.	nil	95
369	AP213	Malignant spindle cell tumor, suggestive of fibrosarcoma arising from dermatofibrosarcoma protuberans.(100%)	Do CD34 stain to highlight the DFSP area.	100
515	AP213	Sarcoma ddx: Monophasic synovial sarcoma (70%), dermatofibrosarcoma protuberans (20%), fibrosarcoma (10%)	immunostain: cytokeratin, EMA, CD34 more sampling to look for glandular component	60
338	AP213	Dermatofibrosarcoma protuberans with fibrosarcoma 100%.	CD34+ for DFSP areas. Remote ddx: monophasic synovial sarcoma, EMA+, CK+ focally. Sampling to look for epithelial element of synovial sarcoma.	100
873	AP213	DDx: dermatofibrosarcoma protuberans with fibrosarcoma area Synovial sarcoma. Perform CD34 (positive in DFSP) and CEA, EMA, CD99 (positive in synovial sarcoma). Probability: 100%	nil	90
222	AP213	Sarcoma arising in dermatofibrosarcoma protuberans.	nil	95

530	AP213	Fibrosarcoma arising from Dermatofibrosarcoma protruberans	nil	95
109	AP213	Fibrosarcoma arising from dermatofibrosarcoma protuberans (100%)	nil	100
517	AP213	Hige grade sarcoma 100% DDX: monophasic synovial sarcoma, fibrosarcoma	Suggest immunohistochemical study i.e. EMA, cytokeratin, CD99 for further classification	50
911	AP213	Dermatofibrosarcoma protuberans with focal fibrosarcomatous area (100%)	nil	100
333	AP213	Dermatofibrosarcoma protuberans with focal fibrosarcomatous transformation, 100%.	Confirm by immunohistochemical studies (CD34 positive, Cytokeratin negative)	100
888	AP213	Dermatofibrosarcoma protuberans with fibrosarcomatous pattern. 100%.	CD34 stain	100
663	AP213	Dermatofibrosarcoma Protuberans	nil	90
763	AP213	Dermatofibrosarcoma protuberans with fibrosarcomatous change	nil	100

448	AP214	Uterine curetting - Complete Hydatidiform Mole 100%	nil	100
246	AP214	Complete hydatidiform mole.	nil	100
369	AP214	Complete hydatidiform mole.(100%)	Do p57 stain to see negative pattern in complete mole.	100
515	AP214	Partial hydatidiform mole (100%)	confirm by chromosome study (triploid)	90
338	AP214	Hydatidiform mole consistent with complete mole 90%, ddx: partial mole 10%.	p57 can help to distinguish between the 2 ddx. Further sampling to look for fetal parts can confirm partial mole.	100
873	AP214	hydatidiform mole, favour partial. Probability: 100%	nil	90
222	AP214	Partial mole	nil	90
530	AP214	Complete hydatidiform mole	nil	100

109	AP214	Hydatidiform mole, favour complete (100%)	Immunostain for P57 will show absence of staining in the cytotrophoblast and villous mesenchyme.	100
517	AP214	Partial mole with placental site reaction 100%	nil	90
911	AP214	Complete Mole (100%)	nil	100
333	AP214	Complete hydatidiform mole (early), 100%.	nil	100
888	AP214	Hydatidiform mole, complete. 100%.	nil	100
663	AP214	Partial Hydatidiform Mole	nil	90
763	AP214	Hydatidiform mole, suggestive of partial mole	All submitted material need to be embedded. The patient should be followed up, with serum HCG monitoring.	90
448	AP215	BREAST mass - SPINDLE CELL HEMANGIOMA 100%	nil	80

246	AP215	Capillary hemangioma.	nil	100
369	AP215	Hemangioma.(100%)	nil	100
515	AP215	Low grade angiosarcoma (100%)	nil	20
338	AP215	Hemangioma 100%, consistent with capillary hemangioma.	DDX: PERILOBULAR HEMANGIOMA is usually diagnosed on those incidental microscopic tiny lesions (around 2mm) instead of those mass lesions such as this one.	100
873	AP215	haemangioma with atypical features. Probability: 100%	nil	100
222	AP215	Malignant vascular tumor: Angiosarcoma, intermediate grade.	nil	20
530	AP215	Angiosarcoma	nil	20
109	AP215	Low grade angiosarcoma (100%)	nil	20

517	AP215	Haemangioma 100%	nil	100
911	AP215	Hemangioma with atypical features (100%)	More blocks	100
333	AP215	Capillary Hemangioma, 100%.	nil	100
888	AP215	Complex hemangioma. 100%	nil	100
663	AP215	Haemangioma extends to excision margin.	nil	100
763	AP215	Angiosarcoma (grade1)	nil	20
448	AP217	SOFT TISSUE around hip - NECROBIOTIC GRANULOMAS with cystic degeneration and xanthogranulomatous inflammation 100%	nil	90
246	AP217	Rheumatoid nodule (necrobiotic granulomas) and foreign body granulomatous inflammation.	The coexisting foreign body granulomatous reaction may be related to previous intraarticular injection or prosthetic implant (HISTORY!)	100

369	AP217	Rheumatoid nodules and bursal cysts.(100%)	nil	100
515	AP217	Rheumatoid nodules, with cystic change (100%)	nil	100
338	AP217	Rheumatoid nodule with cystic change 100%	nil	100
873	AP217	rheumatoid nodule with xanthomatous cystic changes. Probability: 100%	nil	100
222	ap217	Bursal cyst with fibrin deposit and foreign body type granuloma resembling rheumatoid nodule.	nil	80
530	AP217	Rheumatoid nodule	nil	100
109	AP217	Rheumatoid nodule (100%)	nil	100
AP217	AP217	Rheumatoid nodule 100%	nil	100

517	AP217	Rheumatoid nodule 100%	nil	100
911	AP217	Rheumatoid nodules with xanthogranulomatous inflammation (100%)	Suggest clincial correlation for previous surgery or injection	100
333	AP217	Rheumatoid nodule, 100%.	nil	100
888	AP217	Rheumatoid nodule with rupture. 100%	nil	100
663	AP217	Rheumatoid nodules associated with changes in reumatoid arthritis	nil	100
763	AP217	Rheumatoid bursitis and rheumatoid nodules	nil	100
448	AP218	Orbital SOFT TISSUE - LANGERHANS CELL HISTIOCYTOSIS (eosinophilic granuloma) 100%	nil	100
246	AP218	Langerhans cell histiocytosis.	nil	100

369	AP218	Langerhans cell histiocytosis.(100%)	Do CD1a and S100 protein stains to confirm.	100
515	AP218	Langerhan cell histiocytosis (100%)	perform CD1a, S-100	95
338	AP218	Langerhans' cell histiocytosis(Histiocytosis X). 100%	S100+, CD1a+	100
873	AP218	Langerhans cell histiocytosis. Probability: 100%	nil	100
222	AP218	giant cell reparative granuloma	nil	50
530	AP218	Langerhan's cell histiocytosis	nil	100
109	AP218	Langerhans cell histiocytosis (100%)	The Langerhans?cells will be positive for S100, CD1a, langerin, fascin.	100
517	AP218	Langerhan cell histiocytosis 100%	nil	95

911	AP218	Histiocytosis X (100%)	Staining for S-100, CD1a and electron microscopy	95
333	AP218	Langerhan cell histiocytosis, 100%.	nil	100
888	AP218	Langerhans cell histiocytosis. 100%	S100+, CD1a+ for confirmation	100
663	AP218	Eosinophilic Granuloma (Langerhans cell histiocytosis), confirm with S-100, CD1a and Langerin immunostaining.	nil	100
763	AP218	Langerhans' cell histiocytosis	nil	100
448	AP219	NOSE mass - RHABDOMYOSARCOMA 100%	nil	100
246	AP219	Sarcoma, NOS. Favour rhabdomyosarcoma.	A panel of immunostains should be performed. Positivity for myogenic markers (myogenin, desmin) would confirm rhabdomyosarcoma. Positive S-100 protein may suggest MPNST, and malignant melanoma if it also stains with HMB45.	100

369	AP219	Malignant neoplasm. Rhabdomyosarcoma, especially alveolar rhabdomyosarcoma, has to be considered/excluded.(100%)	Do myogenin stain to confirm diagnosis. Other DDx includes other malignant small round cell tumor e.g. olfactory neuroblastoma, melanoma, sinonasal undifferentiated carcinoma, rhabdoid tumor, etc.	100
515	AP219	Malignant neoplasm ddx: rhabdomyosarcoma (70%),olfactory neuroblastoma (30%)	immunostain: desmin, myoglobin, myogenin, NSE, synaptophysin, chromogranin, neurofilament, S-100 protein	100
338	AP219	Olfactory neuroblastoma. 100%	NSE+, synaptophysin+, S100 focal+. Remote ddx: alveolar rhabdomyosarcoma, muscle markers+.	40
873	AP219	DDX: rhabdomyosarcoma, neuroendocrine carcinoma and malignant melanoma. Perform desmin, myoD1, smooth muscle actin, S100, HMB45, epithelial markers and neuroendocrine markers. Probability: 100%	nil	63
222	AP219	Alveolar rhabdomyosarcoma (50%), melanoma(50%)	nil	50
530	AP219	Malignant tumor. Differential diagnosis: 1. Olfactory neuroblastoma. 2. Malignant melanoma. 3. Undifferentiated sinonasal carcinoma.	Need IHC - CK, S-100, HMB45, Melan-A, Synaptophysin, Chromogranin A.	20

109	AP219	Malignant melanoma (100%)	The tumour cells are positive for S100, HMB45 and melan A.	20
517	AP219	Malignant small round cell tumour 100% DDX: olfactory neuroblastoma, sinonasal undifferentiated carcinoma, embryonal rhabdomyosarcoma	Suggest immunohistochemical study i.e. neuron-specific enolase, S-100, chromogranin, desmin, myosin for further delineation.	63
911	AP219	Malignant tumor, Differential diagnosis includes rhabdomyosarcoma (50%), olfactory neuroblastoma (30%), poorly differentiated carcinoma (10%), melanoma (5%), lymphoma (5%)	Immunohistochemical staining for desmin, myoglobin, myo D1, myogenin, AE1/AE3, NSE, synaptophysin, neurofilament, LCA, S-100, HMB-45.	80
333	AP219	Malignant tumor, favor melanoma (90%), olfactory neuroblastoma (10%).	Confirm with immunohistochemistry: HMB45, MelanA positive in melanoma; chromogranin, synaptophysin positive in olfactory neuroblastoma.	20
888	AP219	Alveolar rhabdomyosarcoma. 90%	MyoD1+, Negative NSE/NF to exclude neuroblastoma.	100
663	AP219	Malignant Tumour	Differential diagnoses include osteosarcoma (50%), sinonasal undifferentiated carcinoma (30%), rhabdomyosarcoma (10%) and olfactory neuroblastoma (10%). Immunohistochemical stains for cytokeratin, muscle markers (actin, desmin, myoD1), neural markers (synaptophysin) are suggested to narrow	40

			the differential diagnoses. In case of osteosarcoma, history of prior irradiation should be sought (e.g. for NPC).	
763	AP219	Favour melanoma	Differential diagnoses are sinonasal undifferentiated carcinoma and olfactory neuroblastoma. Suggest immunohistochemical study to exclude - melanoma positive for S100 and HMB45, SNUC for cytokeratins and olfactory neuroblastoma for synaptophysin	20
448	AP220	Cervical LYMPH NODE - ANAPLASTIC LARGE CELL LYMPHOMA 100%	Subject to immunohistochemical workup (e.g. LCA/CD30/ALK1) for confirmation, and to exclude other non-lymphoid malignancies.	100
246	AP220	Anaplastic large cell lymphoma.	nil	100
369	AP220	Malignant non-Hodgkin lymphoma. Anaplastic large cell lymphoma.(100%)	Do CD30 and ALK-1 stains to confirm diagnosis. Also LCA, CD3 and CD20 stains to complete the panel.	100
515	AP220	Anaplastic large cell lymphoma (ki-1 lymphoma) (90%), carcinoma (10%)	immunostain: CD30, ALK, BCK	100

338	AP220	Malignant tumor consistent with malignant lymphoma, large cell. 100% DDX includes 1)Anaplastic large cell lymphoma 2)T cell rich B cell lymphoma 3)Diffuse large B cell lymphoma 4)Hodgkin's disease. etc.	Perform lymphoma markers including ALK1 and CD30 etc. Other remote ddx: melanoma(S100+), poorly differentiated carcinoma(CK+), and lymphoblastic lymphoma.	100
873	AP220	anaplastic large cell lymphoma. Probability: 100%	nil	100
222	ap220	Anaplastic large cell lymphoma	nil	100
530	AP220	Hematolymphoid malignancy. Differential diagnosis: 1. Anaplastic large cell lymphoma. 2. Diffuse large B cell lymphoma. 3. Granulocytic sarcoma.	Need IHC - CD30, ALK, MPO, CD20, CD3, EMA, CAE.	90
109	AP220	Malignant tumour, favour malignant lymphoma (100%), high grade, large cell	To perform immunostains for B and T-cell markers, and also CD30 for possibility of anaplastic large cell lymphoma.	100
517	AP220	Malignant lymphoma 100% DDX: anaplastic large cell lymphoma, syncytial variant of nodular sclerosis Hodgkin's disease	Suggest immunohistochemical study i.e. CD30, CD25, CD15 for further classification	100
911	AP220	Anaplastic large cell lymphoma (100%)	Immunostaining with CD30, ALK, EMA, CD3, CD43, CD20, AE1/AE3	100

333	AP220	Malignant lymphoma, favor anaplastic large cell lymphoma, 100%.	Confirm by immunohistochemical studies CD3+, CD20-, CD30+, ALK-1+	90
888	AP220	Anaplastic Large Cell lymphoma. 100%	ALK-1 stain	100
663	AP220	Anaplastic Large Cell Lymphoma	I would like to perform immunostains for EMA, LCA, CD30, CD3, L26 to confirm the diagnosis. I would also do the stain for ALK because of diagnostic and prognostic significance.	100
763	AP220	Malignant lymphoma, favor anaplastic large cell lymphoma	to be confirmed by immunostaining: CD30+, ALK may be positive, EMA+	100