

ref	code	case	diagnosis	comment	score
2289	448	AP221	Lung - metastatic sarcoma (rhabdomyosarcoma 40%, malignant rhabdoid tumor 40%, anaplastic Wilm's tumour 20%)	To review and correlate with previous paraspinal pathology. To apply immunostaining to assist in tumour classification.	70
2290	222	AP221	pleuropulmonary blastoma	nil	50
2299	246	AP221	Metastatic malignant neoplasm; DDx rhabdoid tumour (50%), rhabdomyosarcoma (50%)	Panel of IHC stains: muscle specific actin, desmin, myoD1, cytokeratin, EMA, S100.  EM: tangled intermediate filaments (in rhabdoid tumour)	80
2307	873	AP221	Malignant tumour, favour rhabdomyosarcoma. Perform staining for desmin, myoD1 and actin (100% probability)	nil	50
2324	663	AP221	Lung mass, excision - Malignant tumor, favour metastatic sarcoma. Differential diagnosis includes metastatic poorly differentiated sarcoma, clear cell sarcoma of kidney and paraganglioma.	nil	50
2332	911	AP221	Malignant biphasic tumour. Metastatic nephroblastoma (50%). Poorly differentiated synovial sarcoma (50%).	Immunohistochemical stain for EMA, Cam5.2, CD99 and bcl-2. RT-PCR for SYT-SSX translocation.	50
2340	109	AP221	Malignant tumour (100%)	Malignant tumour, likely metastasis, has to correlate with previous tumour site and morphology for definitive	50

				diagnosis. Differential diagnoses include Wilm's tumour, synovial sarcoma, need to exclude germ cell tumour such as yolk sac tumour.	
2350	369	AP221	Malignant neoplasm. DDx among neuroblastoma, rhabdoid tumor( including atypical teratoid/rhabdoid tumor), rhabdomyosarcoma, and Wilm's tumor.	Do neuron specific enolase, synaptophysin, chromogranin, neurofilament and NB84 which will be positive in neuroblastoma. Do EMA, vimentin and smooth muscle actin which will be mostly positive in ATRT. Also negative stain for INI1. Do myogenin which will be positive for rhabdomyosarcoma. Do WT1 which will be positive in Wilm's tumor.	60
2352	369	AP221	Forget to add the probability of 100% in the previous submitted answer.	Nil.	0
2353	517	AP221	METASTATIC MALIGNANT TUMOUR 100% DDX RHABDOMYOSARCOMA, PERIPHERAL NERVE SHEATH TUMOUR	SUGGEST IMMUNOHISTOCHEMICAL STUDY IE MYOGENIN, MYOD1, DESMIN, S100 PROTEIN	50
2362	338	AP221	Malignant tumor consistent with metastases. Favor a sarcoma as primary. 100%. The differential includes 1)Rhabdomyosarcoma 2)Leiomyosarcoma 3)Germ cell tumor 4)Neuroblastoma 5)Melanoma.	Do immunostains eg. Myo-D1, desmin, AFP, S100 etc	50

2370	763	AP221	High grade malignant tumor (likely metastatic)	There are areas of apparent biphasic epithelioid-spindle cell pattern and some rhabdoid cytomorphology. Differential diagnoses include synovial sarcoma, rhabdoid tumor, pleuropulmonary blastoma and primitive neuroectodermal tumor etc. Suggest correlation with histology, immunohistochemistry, molecular studies and radiological findings of the lung and paraspinal masses.	60
2378	333	AP221	Metastatic malignant spindle cell tumor (100%), differential diagnoses are rhabdomyosarcoma (10%), rhabdoid tumor(80%), PNET(3%), malignant peripheral nerve sheath tumor(4%), neuroblastoma (3%).	Review previous paraspinal tumor; Immunostaining : myoid markers (myogenin, desmin, actin) for rhabdomyosarcoma; cytokeratins for rhabdoid tumor, loss of INI1 in rhabdoid tumor, CD99 for PNET, S100, neuronal markers for neurogenic tumor.	100
2386	530	AP221	Metastatic sarcomatous lesion. Differential diagnosis: - Rhabdomyosarcoma; - Synovial sarcoma.	Immunohistochemistry to differentiate especially myogenin, desmin, EMA, ect.	50
2394	888	AP221	High-grade sarcoma, differential diagnoses 1. Metastatic synovial sarcoma (50%) 2. Metastatic malignant peripheral nerve sheath tumour with glandular differentiation (30%) 3. Metastatic Wilm <sup>꺆</sup> tumour (10%)	1. Perform immunostains for differentiation: Synovial sarcoma positive for EMA, bcl-2, CD99; MPNST positive for S100, Wilm <sup>꺆</sup> tumour positive for WT1 and PNET positive for chromogranin and synaptophysin. 2. Retrieve old slides for	50

			4. Metastatic Ewing <sup>의</sup> tumour/PNET (10%)	assessment.	
2403	515	AP221	Metastatic malignant tumour DDx: Wilm's tumour & rhabdomyosarcoma	nil	50
2282	448	AP222	Endometrium - Complex hyperplasia with papillary syncytial change and eosinophilic metaplasia 100%	Need follow up aspirate/curettage or examination of uterus specimen (if hysterectomy done for other reason) to rule out malignancy.	50
2291	222	AP222	complex hyperplasia with papillary syncytial metaplasia	nil	50
2300	246	AP222	Endometrioid adenocarcinoma, Grade 1, with focal microglandular pattern (100%)	nil	100
2308	873	AP222	Mixed endometrioid and serous adenocarcinoma (100% probability)	nil	90
2315	369	AP222	Endometrioid adenocarcinoma.(100%)	This aspirate shows FIGO grade I.	100
2325	663	AP222	Endometrium - Endometrioid adenocarcinoma, secretory variant	nil	100

2333	911	AP222	Endometrioid adenocarcinoma (100%).	nil	100
2341	109	AP222	Atypical complex hyperplasia with papillary syncytial metaplasia (100%)	nil	80
2355	517	AP222	ENDOMETRIOID CARCINOMA 100%	nil	100
2363	338	AP222	Endometrioid adenocarcinoma with florid microglandular pattern FIGO grade 1, in a background of atypical hyperplasia. 100%	nil	100
2371	763	AP222	At least atypical complex hyperplasia and papillary syncytial metaplasia	Suggest more sampling to exclude endometrial carcinoma	80
2379	333	AP222	Endometrioid adenocarcinoma	This tumor biopsy exhibits features of microglandular hyperplasia-like change, and eosinophilic metaplasia.	100
2387	530	AP222	Complex atypical hyperplasia with papillary syncytial metaplasia, focally bordering on Adenocarcinoma.	nil	80
2395	888	AP222	Endometrioid adenocarcinoma (100%)	nil	100

2404	515	AP222	Endometrioid adenocarcinoma, low grade.	nil	100
2283	448	AP223	Kidney - composite Papillary carcinoma and Tubulocystic carcinoma 100%	nil	100
2292	222	AP223	papillary renal cell carcinoma	nil	90
2301	246	AP223	Renal cell carcinoma, mixed pattern (conventional & papillary) (100%)	If there is clinical history of end stage renal failure, the diagnosis would be acquired cystic disease associated Renal cell carcinoma	90
2309	873	AP223	Multilocular cystic renal cell carcinoma (100% probability)	nil	80
2316	369	AP223	Renal cell carcinoma.(100%)	nil	80
2326	663	AP223	Kidney - Renal cell carcinoma, grade 2 (Fuhrman)	The overall features are suggestive of renal cell carcinoma complicating acquired cystic disease secondary to chronic dialysis. The prognosis is better than sporadic cases.	80
2334	911	AP223	Tubulocytic carcinoma (100%).	Immunohistochemical stain for CK7.	95

2342	109	AP223	Papillary renal cell carcinoma (100%)	nil	90
2356	517	AP223	PAPILLARY RENAL CELL CARCINOMA TYPE II NUCLEAR GRADE 2 100%	nil	90
2364	338	AP223	Tubulocystic carcinoma with a component of papillary renal cell carcinoma, Furhman nuclear grade 3 out of 4. 100%	nil	100
2372	763	AP223	Renal cell carcinoma	There are focal cystic and papillary areas. Suggest correlation with clinical history for evidence of acquired cystic disease of kidney and history of renal dialysis.	90
2380	333	AP223	Papillary renal cell carcinoma (associated with acquired renal cystic disease)	Correlate with clinical finding of presence of end-stage renal disease.	90
2388	530	AP223	Renal cell carcinoma, papillary variant.	nil	90
2396	888	AP223	Papillary renal cell carcinoma (100%)	nil	90
2402	515	AP223	Papillary renal cell carcinoma	nil	90

2288	448	AP224	Submandibular mass - Solitary fibrous tumour 90% - Myofibroma 10%	To be differentiated by immunostaining. SFT is actin-ve.	100
2293	222	AP224	solitary fibrous tumor	nil	100
2302	246	AP224	Haemangiopericytoma (100%)	IHC stain: CD34 (expected to be positive)	80
2310	873	AP224	Vasoformative tumour DDX: hemangiopericytoma, haemangioendothelioma, solitary fibrous tumour, cellular hemangioma (100% probability)	nil	80
2327	663	AP224	Submandibular mass - Solitary fibrous tumour.	The diagnosis can be confirmed by immunostaining for CD34. Also rule out vascular tumour and smooth muscle tumour by CD31, smooth muscle actin and desmin.	100
2335	911	AP224	Solitary fibrous tumour (100%).	Immunohistochemical stain for CD34 and CD99.	100
2343	109	AP224	Solitary fibrous tumour (100%)	Confirm with immunostain for CD34.	100



2354	369	AP224	Vascular neoplasm, favors capillary hemangioma. DDX includes hemangioendothelioma and glomus type tumor.(100%)	Do CD31 to confirm vascular channels. Do smooth muscle actin to exclude glomus type tumor.	40
2357	517	AP224	SOLITARY FIBROUS TUMOUR 100%	nil	100
2365	338	AP224	Solitary fibrous tumor 100%.	To confirm by CD34 stain.	100
2373	763	AP224	Benign spindle cell tumor: differential diagnoses include myofibroma and solitary fibrous tumor, to be differentiated by CD34 and actin immunostaining	nil	80
2385	333	AP224	Solitary fibrous tumor (80%) Cellular capillary hemangioma (20%)	Immunostaining for CD34 for solitary fibrous tumor; actin to highlight lobulation and pericytes in capillary hemangioma.	100
2389	530	AP224	Spindle cell tumor. Differential diagnosis: Myoepithelioma, Solitary fibrous tumor, Hemangiopericytoma.	nil	80
2397	888	AP224	Differential diagnoses: 1. Epithelioid haemangioendothelioma (70%) 2. Solitary fibrous tumour (30%)	Perform immunostains for differentiation: Epithelioid haemangioendothelioma positive for factor VIII, CD31 and CD34; SFT positive for CD34 only.	60
2405	515	AP224	Solitary fibrous tumour	nil	100

2284	448	AP225	Ovary - Brenner tumour 100%	nil	100
2294	222	AP225	benign brenner tumor	nil	100
2295	222	AP225	benign Brenner tumor	nil	100
2303	246	AP225	Benign Brenner tumour (100%)	nil	100
2311	873	AP225	Benign Brenner <sup>의</sup> tumour (100% probability)	nil	100
2317	369	AP225	Brenner tumor.(100%)	nil	100
2318	369	AP225	Brenner tumor.(100%)	nil	100
2320	369	AP225	Brenner tumor.(100%)	nil	100

2322	369	AP225	Brenner tumor.(100%)	nil	100
2328	663	AP225	Left ovary, biopsy - Benign Brenner tumor	nil	100
2336	911	AP225	Benign Brenner tumour (100%).	nil	100
2344	109	AP225	Benign Brenner tumour (100%)	nil	100
2348	369	AP225	Brenner tumor.(100%)	nil	100
2358	517	AP225	BRNIGN BRENNER TUMOUR 100%	nil	100
2366	338	AP225	Benign Brenner Tumor. 100%	nil	100
2374	763	AP225	Brenner tumor	nil	100

2381	333	AP225	Benign Brenner tumor	nil	100
2390	530	AP225	Benign Brenner tumor.	nil	100
2398	888	AP225	Brenner's tumour (100%)	nil	100
2406	515	AP225	Brenner's tumour	nil	100
2285	448	AP226	Cervico-vaginal polyp - Mullerian adenosarcoma 100%	nil	100
2296	222	AP226	Mixed Muellerian tumor, adenosarcoma	nil	100
2304	246	AP226	Mullerian adenosarcoma with sacromatous overgrowth (100%)	nil	100
2312	873	AP226	Adenosarcoma with sarcomatous overgrowth and heterologous element (100% probability)	nil	100

2321	369	AP226	Adenosarcoma.(100%)	nil	100
2329	663	AP226	Cervical/vaginal polyp - Malignant spindle cell tumor, probably high-grade sarcoma.	Differential diagnoses include spindle cell carcinoma and melanoma. Immunohistochemical stains including cytokeratin and S-100 are suggested for their distinction. The types of high-grade sarcoma include malignant mixed Mullerian tumor and adenosarcoma. Suggest more sections to look for other tumor tissue e.g. glandular component.	80
2337	911	AP226	Adenosarcoma (100%).	nil	100
2345	109	AP226	Embryonal rhabdomyosarcoma (100%)	Confirm with immunostains for muscle markers, desmin, muscle specific actin, myogenin.	70
2359	517	AP226	HIGH GRADE SARCOMA 100%, LINE OF DIFFERENTIATION TO BE DETERMINED BY IMMUNOHISTOCHEMICAL STUDY	SUGGEST IMMUNOHISTOCHEMICAL STUDY IE ACTIN, S100 PROTEIN, CD34 FOR FURTHER CLASSIFICATION	70
2367	338	AP226	High grade sarcoma consistent with adenosarcoma with heterologous element(rhabdomyoblastic differentiation) and sarcomatous overgrowth. 100%.	The rhabdomyoblastic differentiation can be confirmed by skeletal muscle markers. Sampling to confirm the high grade sarcomatous component is greater than 25% of the total tumor	100

				volume.	
2375	763	AP226	High grade spindle cell sarcoma with myoid and botryoides tumor-like morphology, need to consider rhabdomyosarcoma and adenosarcoma	nil	80
2382	333	AP226	Adenosarcoma with sarcomatous overgrowth	There is suggestion of heterologous element (rhabdomyosarcomatous) formation, which can be confirmed with immunohistochemistry for desmin, actin, myogenin etc.	100
2391	530	AP226	Sarcoma botryoides (Embryonal rhabdomyosarcoma).	nil	70
2399	888	AP226	Malignant mixed mullerian tumour (100%)	nil	80
2407	515	AP226	Adenosarcoma	nil	100
2286	448	AP227	Esophagus submucosal mass - Schwannoma 100%	nil	100

2297	222	AP227	gastrointestinal stromal tumor	nil	50
2305	246	AP227	Schwannoma (100%)	IHC: S100 (expected to be positive), C-kit (expected to be negative)	100
2313	873	AP227	Spindle cell tumour, favour benign nerve sheath tumour, confirm with S100, and exclude GIST by CD117 (100% probability)	nil	100
2323	369	AP227	Neurilemmoma.(100%)	Do S100 protein stain to confirm.	100
2330	663	AP227	Oesophagus submucosal mass - Spindle-cell neoplasm; differential diagnoses including schwannoma and gastrointestinal stromal tumour (please see comment).	Immunohistochemical studies including S100 and CD117 are suggested for confirmation. In case of a typical schwannoma, the tumour cells should show diffuse nuclear positivity for S100 and general negativity for CD117, while the reverse occurs in case of a typical gastrointestinal stromal tumour. Smooth muscle actin can also be performed in order to rule out leiomyoma.	80
2338	911	AP227	Schwannoma (100%).	nil	100

2346	109	AP227	Schwannoma (100%)	Confirm with immunostain for S100. Also perform CD34 and c-kit to exclude gastrointestinal stromal tumour (GIST).	100
2360	517	AP227	SPINDLE CELL TUMOUR 100%, DDX: SCHWANNOMA, LEIOMYOMA, MYCOBACTERIAL SPINDLE CELL TUMOUR.	SUGGEST IMMUNOHISTOCHEMICAL AND SPECIAL STAINS i.e. S100 PROTEIN, ACTIN, ZIEHL-NEELSEN. CYTOLOGICALLY BENIGN BUT SIZE IS RATHER LARGE, NEED TO ASSESS MORE SECTIONS TO DETERMINE NATURE/BEHAVIOUR.	65
2368	338	AP227	Schwannoma, 70%. Gastrointestinal stromal tumor, 30%.	Perform S100 and c-kit stains.	100
2376	763	AP227	Schwannoma	Differential diagnosis: gastrointestinal stromal tumor, to be differentiated by S100 and CD117 immunostaining.	100
2383	333	AP227	Schwannoma	Confirm with immunostaining for S100. Also perform CD117 to exclude gastrointestinal stromal tumor.	100
2392	530	AP227	Schwannoma.	nil	100
2400	888	AP227	Benign spindle cell tumour, differential diagnoses: 1. GIST (70%) 2. Schwannoma with ancient change (30%)	1. Perform immunostains for differentiation: GIST positive for c-kit; schwannoma positive for S100.	60



2408	515	AP227	Neurilemmoma	nil	100
2287	448	AP228	Soft palate - Rhinosporidiosis 100%	nil	100
2298	222	AP228	Rhinosporidiosis	nil	100
2306	246	AP228	Rhinosporidiosis (100%)	nil	100
2314	873	AP228	Rhinosporidiosis (100% probability)	nil	100
2331	663	AP228	Soft palate, mass biopsy - rhinosporidiosis	nil	100
2339	911	AP228	Rhinosporidiosis (100%).	nil	100
2347	109	AP228	Rhinosporidiosis (100%)	nil	100

2349	369	AP228	Rhinosporidiosis.(100%)	DDx is coccidioidomycosis. Suggest clinical and microbiological correlation.	100
2361	517	AP228	RHINOSPORIDIOSIS 100%	nil	100
2369	338	AP228	Fungal infection consistent with Rhinosporidiosis. 100%	A remote possibility is Coccidioides immitis infection which can be confirmed by culture.	100
2377	763	AP228	Rhinosporidiosis	nil	100
2384	333	AP228	Rhinosporidiosis	nil	100
2393	530	AP228	Rhinosporidiosis.	nil	100
2401	888	AP228	Rhinosporidiosis (100%	nil	100
2409	515	AP228	Rhinosporidiosis	nil	100