



e-Film Reading Examination – November 2020

Question 1	
History	A 77-year-old male presents with painful chest lump.
Imaging	CT Chest, Abdomen and Pelvis (20 December 2018)
Findings	<p>CT chest and abdomen:</p> <ul style="list-style-type: none">• Expansile destructive chest wall soft tissue mass• Involves two adjacent ribs• Dense calcified central matrix• Prostate tumour with extracapsular extension/neurovascular invasion• Mesorectal lymph node• Aortocaval lymphadenopathy• Fibrotic lung disease in a UIP pattern with prominent mediastinal lymph nodes• Left inguinal hernia <p>Minor Findings:</p> <ul style="list-style-type: none">• No liver/lung metastases
Likely Diagnosis	<ul style="list-style-type: none">• Metastatic prostate cancer• Incidental UIP
Differential	<ul style="list-style-type: none">• N/A
Further Investigation or Management	<ul style="list-style-type: none">• Image guided biopsy of the ribs• Correlation with PSA





Question 2	
History	40-year-old female, 3 weeks post caesarean section. 1-week low back pain. Had epidural.
Imaging	CT Abdomen and Pelvis (11 November 2013)
Findings	<p>Major Findings:</p> <ul style="list-style-type: none">• Occlusive thrombus in infrarenal IVC, both iliac veins and right common femoral veins• Non-occlusive thrombus in right ovarian vein• Varices and patent left ovarian vein• Dilated lumbar veins <p>Minor Findings:</p> <ul style="list-style-type: none">• Free fluid in pelvis• Postpartum uterus• No other abnormality in the abdomen and pelvis
Likely Diagnosis	<ul style="list-style-type: none">• Extensive IVC thrombosis
Differential	<ul style="list-style-type: none">• None
Further Investigation or Management	<ul style="list-style-type: none">• Anticoagulation• Vascular Surgical/Interventional Radiology review



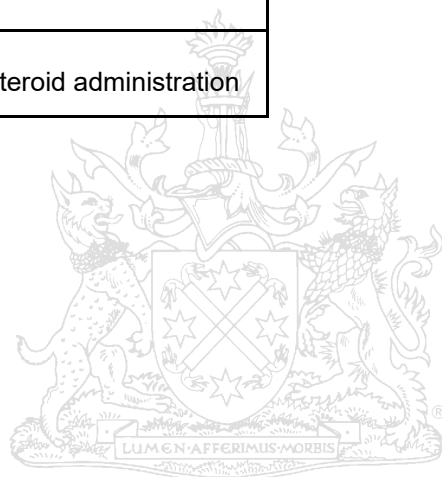


Question 3	
History	A 26 year old female presented with 6 months of wrist swelling.
Imaging	MRI Wrist (28 November 2013)
Findings	<p>Key words that should appear in report:</p> <ul style="list-style-type: none">• subarticular• expansile• cortical destruction• mixed solid/cystic• solid: intermediate T1, intermediate T2, uniform enhancement• cystic: low T1, high T2, , peripheral enhancement• fluid-fluid level <p>Minor Findings:</p> <ul style="list-style-type: none">• anterior interosseous neurovascular bundle deviated• other nerves clear• no involvement of ulna• no muscle invasion
Likely Diagnosis	<ul style="list-style-type: none">• Giant Cell Tumour• Aneurysmal Bone Cyst component
Differential	<ul style="list-style-type: none">• Telangiectatic osteosarcoma• Metastasis• If correct dx and leaves blank
Further Investigation or Management	<ul style="list-style-type: none">• Open biopsy





Question 4	
History	82 year old female with increasing confusion and slurring of speech, recurrent falls.
Imaging	<ul style="list-style-type: none">• CT Head (20 August 2013)• MRI Head (28 August 2013)
Findings	<p>CT Major Findings:</p> <ul style="list-style-type: none">• Left parietal occipital lobe lesion – size: approx. 3cm• Central amorphous relatively high attenuation• Surrounding vasogenic oedema• Mass effect – minimal for the extent of process• No necrosis, haemorrhage or calcification <p>MRI Major Findings:</p> <ul style="list-style-type: none">• Left parietal occipital centric lobe lesion – amorphous, multifocal• Lesion definition<ul style="list-style-type: none">○ Relative T2 hypointensity foci surrounded by extensive T2 hyperintensity– extends into temporal and frontal lobes– crosses the splenium of the corpus callosum (– extends to the lateral ventricle○ T1 hypointensity with avid multifocal amorphous homogeneous Gd enhancement○ Diffusion restriction – associated with CE and T2 lesion○ Mass effect – minimal for the extent of process○ No necrosis, haemorrhage <p>Minor Findings and Exclusions (CT and/or MRI):</p> <ul style="list-style-type: none">• Small vessel ischaemic disease – periventricular low attenuation• Small old right cerebella infarcts• Right maxillary retention cyst• Patent vessels• No hydrocephalus
Likely Diagnosis	<ul style="list-style-type: none">• Cerebral lymphoma• Small vessel ischaemic disease & old cerebellar infarcts
Differential	<ul style="list-style-type: none">• Metastatic disease• Diffuse glioma – high grade
Further Investigation or Management	<ul style="list-style-type: none">• Whole body PET-CT for staging• Advise attending clinician to prevent steroid administration





Question 5	
History	A 72-year-old female. History of treated non-Hodgkin's lymphoma. Now septic and unwell.
Imaging	CT Chest post contrast (5 June 2019)
Findings	<p>Major Findings</p> <p><u>Right</u></p> <ul style="list-style-type: none">• Pleural effusion• Atelectasis with contained pulmonary masses the larger of which (≈2.5cm) are necrotic/cavitary <p><u>Left</u></p> <ul style="list-style-type: none">• Complex/encysted/loculated pleural effusion• Lower lobe consolidation with contained (5cm) necrotic pulmonary mass• Bilateral calcific pleural plaque• Normal spleen/ no enlarged lymph nodes <p>Minor findings</p> <ul style="list-style-type: none">• Atheroma; inc abdo aneurysm, left subclavian narrowing, coronary artery etc• No interstitial lung disease• Hepatomegaly/anasarca
Likely Diagnosis/ Differential	Cavitary necrosis due to: <ul style="list-style-type: none">• septic emboli or pulmonary lymphoma or pneumonia• Possible left empyema/parapneumonic effusion
Further Investigation or Management	<ul style="list-style-type: none">• Aspirate left effusion





Question 6	
History	A 20-year-old female presented with midline swelling that has progressively enlarged. An MRI study were than performed to evaluate the swelling.
Imaging	MRI Neck (14 January 2019)
Findings	<p>Major Findings:</p> <p>Left Neck lesion</p> <ul style="list-style-type: none">• Large cystic mass with dimensions of 6 x 6 x 5 cm (AP, TV and CC)• T1: Intermediate signal intensity• T2: Hyperintense to adjacent muscle• 2 inclusion bodies predominantly of low signal intensity on T2 sequences <p>Minor Findings:</p> <ul style="list-style-type: none">• The lesion extends inferiorly to distend the mylohyoid muscles but remains confined to the oral cavity.• Well circumscribed margins
Likely Diagnosis	<ul style="list-style-type: none">• Lingual dermoid with the presence of inclusion bodies
Differential	<ul style="list-style-type: none">• Thyroglossal cyst• Ranula
Further Investigation or Management	<ul style="list-style-type: none">• Ultrasound• Fine needle biopsy





Question 7	
History	A 32 year old female presented with intermenstrual bleeding for investigation. She is currently on day 38 of irregular long cycles. She has a negative B-HCG.
Imaging	US Pelvis, transabdominal and transvaginal scans (4 February 2019)
Findings	Modality 1 Major Findings <ul style="list-style-type: none">• Endometrial thickness 10.2mm, with endometrium containing a 12mm echogenic mass<ul style="list-style-type: none">○ Feeder vessel into endometrium• 26mm Solid lesion in the right adnexa<ul style="list-style-type: none">○ adjacent to the uterus with vascular pedicle○ separate to the right ovary• Mild diffuse adenomyosis Minor Findings: 0.5 marks each <ul style="list-style-type: none">• Retroverted uterus, normal in shape.• Normal cervix• Normal sized right ovary• Normal sized left ovary• Dominant follicle 16mm left ovary (no mark if called a cyst)• No free fluid
Likely Diagnosis	<ul style="list-style-type: none">• Endometrial Polyp• Pedunculated fibroid• Diffuse adenomyosis
Differential	<ul style="list-style-type: none">• No differential
Further Investigation or Management	<ul style="list-style-type: none">• Gynaecological referral with view to Hysteroscopy, D&C +/- laparoscopy Comparison with old films would be helpful to determine chronicity of solid mass in the adnexa.





Question 8	
History	A 10-year-old male presented with pain and lower limb deformity after landing awkwardly while jumping his motorbike.
Imaging	X Ray Right knee, AP and Lateral (29 March 2016) CT Right Knee CT, bone window, coronal, CT, bone window, axial (30 March 2016) X Ray Right knee, AP and Lateral (10 July 2017)
Findings	Major findings 1 <ul style="list-style-type: none">• Salter Harris 2 fracture prox tibia• Salter Harris 2 fracture prox fibula• Both fractures undisplaced, non angulated• Soft tissue swelling ++medial knee/patella tendon Major Finding 2 <ul style="list-style-type: none">• Eccentric posteromedial cortical based lytic lesion tibia proximal diaphysis• Narrow zone transition (corticated margin)• No periosteal reaction• No matrix calcification• No cortical destruction• No soft tissue mass X-rays 10/07/2017 <ul style="list-style-type: none">• No growth arrest proximal tibia/fibula• Healing fibrous cortical defect (now sclerotic)
Likely Diagnosis	<ul style="list-style-type: none">• Salter Harris 2 fractures proximal tibia and fibula• Proximal tibial fibrous cortical defect
Differential	<ul style="list-style-type: none">• Consider fail if suggests an aggressive lesion instead of fibrous cortical defect
Further Investigation or Management	N/A

