

Opening stem: An 80 year old man presents with a leaking AAA and is to undergo Emergency Surgery

| TOPIC | QUESTIONS | KNOWLEDGE (essential in bold) | NOTES |
|---|---|--|---|
| <p>Anatomy: Photo - Abdominal Aorta / posterior abdominal wall</p> | <ol style="list-style-type: none"> Identify and name the blood vessels in this image. Identify the ureters and describe their course What are the narrowest points of the ureters? | <p>Aorta (1), common iliac arteries (3), femoral artery (9), IVC (23), Common iliac veins (4), External iliac arteries (7), External iliac veins (8), Internal iliac arteries (25), IMA (22), Femoral vein (12), lumbar artery (13), testicular vessels (39)</p> <p>Ureters (40) Origin at the renal hilum (PUJ); run inferiorly lying across the psoas (32) ; Lie medially to tips of the lumbar tps (on xray); Cross over the pelvic brim ; Cross anteriorly to the bifurcation of the common iliac artery; lie on the lateral wall of the pelvis, travels medially to bladder; short intramural path at VUJ</p> <p>Narrowings at the PUJ, VUJ, & pelvic brim</p> | <p>4 in bold PLUS 3 others to pass</p> <p>Correctly identifies ureters PLUS 3 points</p> <p>2 of 3 points</p> |
| <p>Pathology: Abdominal Aortic Aneurysms</p> | <ol style="list-style-type: none"> What are the risk factors for development of abdominal aortic aneurysms? Describe the pathogenesis of AAA formation What are the clinical consequences of an AAA? | <p>Male; Smoking; Age > 60; Family History; Connective tissue disease (eg. Ehlers Danlos); Vasculitis; Hypertension, Diabetes; Atherosclerosis</p> <p>Atherosclerotic plaque in intima compresses media with degeneration and weakness of wall and cystic medial degradation Local inflammation Proteolytic enzymes with collagen degradation -role of matrix metalloproteinases (MMP). Loss of vascular smooth muscle cells. Inappropriate Synthesis of non-elastic ECM</p> <p>Rupture: increase with diameter (higher if >5cm) & can be retroperitoneal OR intra peritoneal with rapid fatal haemorrhage <u>Obstruction:</u> ischaemia from branch vessel obstruction eg. mesenteric, vertebral, renal <u>Embolism:</u> plaque or thrombus <u>Impingement or compression</u> of adjacent structure (eg. ureter) <u>Painless mass</u></p> | <p>5 to pass</p> <p>2 of 3 bold to pass</p> <p>Bold and 2 others.</p> |

tem: A 60 yo woman presents with symptoms suggestive of carpal tunnel syndrome

| TOPIC | QUESTIONS | KNOWLEDGE (essential in bold) | NOTES |
|--|---|--|---------------------------------------|
| Anatomy: X-ray - carpal bones / hand Include description of contents of carpal tunnel | Identify the carpal bones. | Identify all carpal bones in AP view. | All bones required |
| | Identify the attachments of the flexor retinaculum. | Scaphoid tubercle, hook of hamate, trapezium and pisiform | 2 of 4 |
| | What structures pass through the carpal tunnel? | FCR/FPL/FDS/FDP tendons + Synovial sheaths Median nerve | bold to pass |
| | Which muscles flex the wrist? | FCR, FCU, FPL, FDM, FDS, FDL, Palmaris longis | 5 of 7 |
| Her symptoms are due to complications of lung cancer | | | |
| Pathology: Clinical effects of tumours | What is the definition of a neoplasm? | Abnormal growth of a tissue Growth exceeds and is uncoordinated with that of the original tissue Growth continues in the absence of the stimuli which evoked the change (preys on host and serves no purpose) | Must get the gist of all 3 |
| | How may a malignant tumour affect the 'host'? | Local and metastatic direct effects. Pressure, Bleeding, ulceration, rupture and infarction. Cachexia Hormonal Paraneoplastic: <ul style="list-style-type: none"> - <i>Endocrinopathy with 3 examples (Cushings, SIADH, Ca++ up, hypoglycaemia, Carcinoid synd, polycythaemia)</i> - <i>Nerve and muscle – myasthenia,</i> - <i>Skin - acanthosis nigricans, dermatomyositis</i> - <i>Bone: HPOA and clubbing</i> - <i>Blood/Vascular: anaemia, venous thrombosis</i> | 3 of 4 bold |
| | (Prompt: what is meant by paraneoplastic syndrome?) Give examples of paraneoplastic endocrinopathies | | 3 examples of paraneoplastic syndrome |

