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SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY  
THIRUVANANTHAPURAM—695 011

ENTRANCE EXAMINATION - ACADEMIC SESSION JANUARY 2019

PROGRAM: MCh Vascular Surgery

Time:90 Minutes

Max.Marks: 100

(Select the most appropriate answer)  
(There are no negative marks for wrong answers)

- [1] Which of the following is **Not** an indication for a bypass to the popliteal artery?
- Mild to moderate intermittent claudication.
  - Non-healing toe ulcer with an ankle brachial index (ABI) of 0.30.
  - Rest pain.
  - Symptomatic popliteal aneurysm, entrapment syndrome, or adventitial cystic degeneration
- [2] What is the best investigation to carry out to decide whether the hypertension has a reno-vascular origin?
- Renin in serum.
  - Renography with captopril provocation.
  - Magnetic resonance angiography (MRA).
  - Renal Doppler
- [3] In patient with known history of Heparin Induced Thrombocytopenia who undergoes abdominal aortic aneurysm repair, which among the following anticoagulation is **Not** used intraoperatively ?
- Fondaparinux
  - Bivaluridin
  - Dabigatran
  - Argatroban

- [4] How should the incompetent perforator veins best managed among the following options based on current recommendations?
- Subfascial endoscopic perforator surgery (SEPS).
  - Ligation through Linton–Cockett incisions.
  - Ligation through small skin incisions.
  - Duplex-guided sclerotherapy.
- [5] Which among the following is an absolute indication for surgical venous thrombectomy in a patient with acute DVT of lower limb?
- Failure in anticoagulation
  - Heparin Induced Thrombocytopenia
  - Phlegmasia cerulea dolens
  - Develops bleeding due to anticoagulation
- [6] A Juxta-renal abdominal aortic aneurysm is defined as?
- One of the two renal arteries arising from aneurysm
  - Both renal arteries arising from aneurysms
  - Aneurysm closely abutting but not involving renal ostia
  - Aneurysm involving all the viscera-renal arteries
- [7] Carotid artery occlusive disease most often produces transient ischemic attacks or stroke by which of the following mechanisms?
- Reduction of flow to affected area of brain through stenotic or occluded vessels
  - Embolisation of atheromatous debris and/or clot causing occlusion of the intracranial vessels
  - Thrombosis and propagation of the clot into the intracranial branches
  - All the above are equally contributory
- [8] Which among the following is the best method of prevention of spinal cord ischemia during TAAA open repair?
- Epidural cooling
  - CSF Drain
  - Moderate hypothermia

d. Methyl Prednisolone

[9] All among the following are randomized trials comparing Endovascular aneurysm repair with open repair of abdominal aortic aneurysm, **Except?**

- a. EVAR 1 trial
- b. Over trial
- c. EVAR 2 trial
- d. DREAM trial

[10] As per the Modified Crawford classification of thoraco-abdominal aortic aneurysms, an aortic aneurysm extending from T6 vertebra level to above the renal artery is?

- a. Type III
- b. Type V
- c. Type I
- d. Type IV

[11] The FDA approved antidote for reversal of effect of Dabigatran is-

- a. Daratumumab
- b. Eculizumab
- c. Idarucizumab
- d. Natalizumab

[12] As per the NASCET trial benefit of stroke prevention from carotid endarterectomy (CEA) in symptomatic patients is proven above what percentage of carotid stenosis?

- a. 50%
- b. 60%
- c. 70%
- d. 80%

[13] All the following factors are associated with poor maturation of AV fistula **Except-**

- a. Diabetes mellitus
- b. Old age
- c. Male sex
- d. <2mm diameter of vein

- [14] Oculo sympathetic palsy or partial Horner's syndrome is seen in
- Carotid Fibromuscular Dysplasia
  - Carotid dissection
  - Carotid aneurysm
  - Carotid stenosis
- [15] Who is considered as father of Vascular Surgery?
- Michael DeBakey
  - Alexis Carrel
  - Rudolph Matas
  - John Hunter
- [16] Most common artery involved in Takayasu arteritis is:
- Common carotid artery
  - Left Subclavian artery
  - Right Subclavian artery
  - Renal artery
- [17] Drugs used for sclerotherapy of varicose veins are all **Except**.
- Ethanolamineoleate
  - Polidocanol
  - Sodium tetradecyl sulfate
  - Ethanol
- [18] Which among the following is wrong about Carotid body tumours?
- Predominantly derived from cells associated with parasympathetic system
  - Usually non secretory and non functional tumours
  - Predominantly derives from cells associated with sympathetic system
  - Clinical malignancy in CBT is around 5% of the cases
- [19] A 54yrs old male presented with acute severe back ache. CT shows Type B aortic dissection without any malperfusion syndrome. Which is the best management for this patient?
- Best medical management with adequate control of blood pressure and HR

- b. Emergency TEVAR
- c. Emergency Fenestration
- d. Open surgical repair

[20] Most common cause for delayed prosthetic graft failure beyond 5 yrs from implantation is?

- a. Poor run off
- b. Graft structural abnormality
- c. Progression of Atherosclerosis
- d. Intimal Hyperplasia

[21] Which of the following is **Not** associated with increased risk of rupture in Abdominal Aortic Aneurysm?

- a. Uncontrolled Hypertension
- b. Uncontrolled Diabetes Mellitus
- c. COPD
- d. Aneurysm Diameter >5.5cm

[22] A 55yrs old male was incidentally diagnosed with infra renal abdominal aortic aneurysm of size 4.0cm in diameter. He is a chronic smoker, COPD and diabetic. Which of the following is correct regarding managing this patient?

- a. Serial USG at 3 monthly interval and intervene once the diameter reaches 5.5cm
- b. Serial USG at 6 monthly interval and intervene once the diameter reaches 5.5cm
- c. Aneurysm should be operated since he is young with multiple comorbidities and hence the risk of rupture is very high
- d. Serial USG at 12 monthly interval until it reached 4.5cm and then at 6monthly interval until it reaches 5cm and then 3 monthly interval until it reaches 5.5cm and then intervene

[23] When comparing EVAR with open repair of abdominal aortic aneurysm which of the following is true?

- a. Open surgery is safer for high risk patients
- b. Young fit patients with anatomically suitable aneurysm should be preferentially treated with EVAR because of low perioperative risk

- c. The mortality benefit associated with EVAR is lost after 4 years because of high mortality due to radiation induced cancer
- d. Late aneurysm rupture after EVAR is noted in both first and second generation devices

[24] Which is the most common type of Thoracic outlet syndrome?

- a. Arterial
- b. Venous
- c. Neurological
- d. Combined

[25] Which among the following describes subintimal angioplasty technique for long segment SFA occlusion?

- a. PETTICOAT Technique
- b. SAFARI Technique
- c. SALT Technique
- d. FIRE Technique

[26] In Acute mesenteric ischemia the Embolus typically lodges at?

- a. Origin of SMA
- b. 5-10cm beyond the take off of SMA
- c. Distal SMA branches
- d. At Mid Colic artery take off

[27] What is the most common histopathological variants of Fibromuscular Dysplasia (FMD)?

- a. Perimedial Fibroplasia
- b. Medial Fibroplasia
- c. Medial Hyperplasia
- d. Intimal Fibroplasia

[28] What is Herald bleeding ?

- a. A bleeding where etiology cannot be determined
- b. Small bleeding before a large one from a major artery
- c. A warning bleeding before a fatal one

- d. A small hematemesis before malena
- [29] Optimal graft configuration in open surgical bypass of chronic mesenteric bypass patients is?
- Antegrade Aorto-SMA/Celiac Artery bypass
  - Retrograde infrarenal aorta SMA bypass
  - Retrograde Common iliac artery to SMA bypass
  - Depends on patient's anatomy and cardiovascular risk factors
- [30] A 23yrs old female a known case of Atrial Fibrillation presented with acute onset of Rt UL pain x 3 hrs. Clinically Right upper limb pulses are absent, limb is cold and finger movements are absent. What is the next immediate step in managing this patient?
- Since clinically class IIb, immediately take for surgery
  - Get a CT Angiogram of upper limb and plan for surgery
  - Give a bolus dose of unfractionated heparin (approx 80U per kg)
  - Get duplex alone since CT takes long time and then shift to OT for surgery
- [31] Which among the following is Not advantage of autologous AV Fistula over AV graft for dialysis access?
- Excellent long term patency
  - Lower complication rate
  - Incidence of arterial steal is very less
  - Short lag time from construction to maturation
- [32] Which among the following is false about Hypothenar Hammer syndrome?
- It involves the Rt hand most commonly (dominant hand)
  - Thumb is usually involved
  - H/o manual labor with repetitive strikes of palm is present
  - Raynaud's phenomenon is usually absent
- [33] Most common pathology causing left subclavian artery stenosis is
- Atherosclerosis
  - Takayasuarteritis
  - Dissection
  - Trauma

- [34] All the following measures are indicated in perioperative management of ruptured AAA **Except?**
- Surgical preparation and drape before induction
  - Permissive hypotension
  - Passive cooling of the patient
  - Blood recuperation and auto transfusion devices
- [35] Contraindication for EVAR in ruptured AAA are all **Expect?**
- Infra renal neck diameter >30mm
  - Aortic bifurcation diameter >18mm
  - Circumferential thrombus in the infra renal neck
  - Infra renal Neck length <10mm
- [36] Which of the following is True regarding endoleak after EVAR?
- Type II endoleaks never requires treatment
  - Type III endoleaks always requires open conversion
  - Type V endoleaks shows aneurysm sac enlargement with minimal contrast filling the sac
  - Type I and III always requires intervention
- [37] Etiology of primary aorto enteric fistula are all **Except?**
- Pulsating pressure of aneurysm
  - Duodenal ulcer
  - Graft infection
  - Ruptured aneurysm
- [38] Which of the following is True regarding inflammatory aneurysm?
- They are not amenable for EVAR
  - The surrounding retroperitoneal fibrosis usually resolves after surgery
  - Retroperitoneal approach for surgery not feasible due to dense fibrosis in retroperitoneum
  - The fibrosis never involves the ureter



- [39] Most common cause of lower extremity amputation in India is?
- Trauma
  - Complications secondary to diabetes mellitus
  - Acute limb ischemia
  - Neoplasm
- [40] In WiFi classification which among the following is **Not** a component?
- Degree of the ischemia to limb
  - Presence of infection in the foot
  - Level of occlusion of the vessels
  - Nature of the ulcer
- [41] A 70yrs old male a known diabetic with non healing ulcer of the lateral two toes of the left foot and rest pain. Ct angio shows long segment occlusion of Left SFA. This patient comes under what category of Rutherford category of classification?
- 4
  - 5
  - 6
  - Both 4 and 6
- [42] All are clinical features of Klippel-Trenaunay Syndrome **Except**?
- High Flow AV shunting
  - Long bone hypertrophy
  - Lateral Varicosity
  - Port wine nevus
- [43] Best option to treat to asymptomatic post puncture CFA pseudoaneurysm of 2 cm size is?
- Conservative treatment since its asymptomatic and <2.5cm size
  - Surgical correction
  - USG guided compression
  - USG guided thrombin injection
- [44] All among the following is a Randomized trial comparing CEA and CAS **Except**?
- CREST

- b. SAPPHIRE
- c. SPACE
- d. BASIL

- [45] Which among the following is an acquired Thrombophilic disorder?
- a. Protein C and Protein S deficiency
  - b. Antiphospholipid Antibody syndrome
  - c. Factor V Mutation
  - d. Hyper Homocystenemia
- [46] A 56yrs old male presented with Acute limb ischemia for 3 days duration of right lower limb due to acute popliteal artery thrombosis. Clinically the patient has Acute Limb Ischemia Class IIa. Based on current evidence of management which is the best option in this patient?
- a. Anticoagulation alone
  - b. Immediate surgical thrombectomy
  - c. Catheter directed thrombectomy
  - d. Amputation of the leg
- [47] All the following classifications connective tissue diseases are associated with Hereditary aortic aneurysms **Except**?
- a. Ehlers-Danlos syndrome type IV
  - b. Marfan's syndrome
  - c. Ehlers-danlos syndrome type III
  - d. Loeys-Dietz syndrome
- [48] Which among the following has better outcome with limb threatening arterial steal following Brachio cephalic AV Fistula in terms of salvage of limb as well as fistula?
- a. Percutaneous transluminal angioplasty
  - b. Banding of Av Fistula
  - c. Revascularisation using distal inflow
  - d. AV Fistula ligation
- [49] Which of the following is **Not** a classical indication to evaluate for renal artery stenosis?
- a. Requirement of more than 3 antihypertensive drugs for control of hypertension

- b. Development of renal dysfunction in a 60 year-old diabetic
- c. Young patient (<30years) with episodes of 'flash' pulmonary edema
- d. Increasing serum creatinine on administration of ACE inhibitors

[50] Which is the most common site of peripheral arterial aneurysms?

- a. Femoral artery
- b. Popliteal artery
- c. Brachial artery
- d. Subclavian artery

[51] FNAC is useful in all the following types of thyroid carcinoma **Except**?

- a. Papillary
- b. Follicular
- c. Anaplastic
- d. Medullary

[52] Most common Solitary Thyroid nodule is-

- a. Follicular Adenoma
- b. Hurthle cell carcinoma
- c. Papillary carcinoma
- d. Benign Thyroid Nodule

[53] Investigation of choice in Hirschsprung's disease is-

- a. Rectal manometry
- b. Rectal examination
- c. Rectal biopsy
- d. Barium enema

[54] Meckel's diverticulum is a derivative of-

- a. Allantoic diverticulum
- b. Vitellointestinal duct
- c. Ventral mesogastrium
- d. Ductus arteriosus

[55] Barrett's oesophagus is diagnosed by-

- a. Squamous metaplasia
- b. Intestinal metaplasia
- c. Squamous dysplasia
- d. Intestinal dysplasia

[56] Mallory Weiss syndrome is partial thickness rupture occurs at-

- a. Gastric cardia
- b. Oesophagus mucosa
- c. Gastro oesophageal junction
- d. Gastroduodenal junction

[57] Most common type of intussusceptions is-

- a. Ileo-colic
- b. Ilio-ileal
- c. Colo-colic
- d. Caeco-colic

[58] Coffee bean sign is usually seen in-

- a. Volvulus
- b. Pyloric obstruction
- c. Intussusception
- d. Intestinal obstruction

[59] Spastic ileus is seen in-

- a. Porphyria
- b. Retroperitoneal abscess
- c. Hypokalemia
- d. MI

[60] Which of the following is the most common endocrine tumour of pancreas-

- a. Insulinoma
- b. Gastrinoma
- c. VIPoma

d. Glucagonoma

[61] Commonest stone in case of UTI is-

- a. Phosphate
- b. Urate
- c. Cysteine
- d. Calcium oxalate

[62] "Spider leg" deformity in excretory urogram occurs in-

- a. Hydronephrosis
- b. Polycystic kidney
- c. Uretrocele
- d. Renal agenesis

[63] Carcinoma urinary bladder commonly presents as-

- a. Hematuria
- b. Frequency
- c. Dysuria
- d. Abdominal lump

[64] The most unlikely clinical feature of Hepatocellular carcinoma is-

- a. Hepatomegaly
- b. Raised alpha fetoprotein levels
- c. Raised alkaline phosphatase
- d. Jaundice

[65] Most common tumor of spleen is-

- a. Lymphoma
- b. Sarcoma
- c. Hemangioma
- d. Metastasis

[66] The treatment of choice for mucocele of gall bladder is-

- a. Aspiration of mucous

- b. Cholecystectomy
- c. Cholecystostomy
- d. Antibiotics and observation

[67] A patient of post-cholecystectomy biliary stricture has undergone an ERCP three days ago. Following this she had developed acute cholangitis. The most likely organism is-

- a. Escherichia coli
- b. Bacillus fragilis
- c. Streptococcus viridians
- d. Pseudomonas aeruginosa

[68] TPN is indicated in all **Except-**

- a. Short bowel syndrome
- b. Burns
- c. Sepsis
- d. Enterocutaneous fistula

[69] Hypochloremic, hypokalemic, metabolic alkalosis is seen in-

- a. Hirschsprung's disease
- b. Esophageal atresia
- c. Congenital hypertrophic pyloric stenosis
- d. Jejunal atresia

[70] One unit of fresh blood raises the Hb% concentration by-

- a. 1 gm%
- b. 2 gm%
- c. 2.2 gm%
- d. 0.1gm%

[71] In India, what is the most common cause of unilateral lymphoedema of lower limb?

- a. Lymphoedema tarda
- b. Carcinoma of penis with metastatic nodes
- c. Filariasis

d. Tubercular lymphadenopathy

[72] All of the following lower intracranial pressure **Except-**

- a. Mannitol
- b. Furosemide
- c. Corticosteroids
- d. Hyperventilation

[73] Which among the following is the most common neoplasm of salivary gland?

- a. Pleomorphic adenoma
- b. Adenocystic carcinoma
- c. Mucoepidermoid
- d. Mixed tumour

[74] Hyoid bone is closely associated with-

- a. Bronchogenic cyst
- b. Cystic hygroma
- c. Thyroglossal cyst/fistula
- d. Branchial cyst

[75] Parathyroid adenoma most commonly involves which of the following site-

- a. Thyroid substance
- b. Superior parathyroid lobe
- c. Inferior parathyroid lobe
- d. In the mediastinum

[76] Which among the following is not a posterior Mediastinal tumour

- a. Neurofibroma
- b. Thymoma
- c. Lymphoma
- d. Neuroenteric cyst

[77] Pleural tapping in mid axillary line, muscle not pierced is-

- a. Internal intercostals

- b. Serratus anterior
- c. Rhomboid major
- d. Trapezius

[78] Which of the following does not correlate with severity of acute pancreatitis?

- a. Serum amylase
- b. Serum glucose
- c. Serum calcium
- d. AST

[79] Green discharge is most commonly associated with –

- a. Duct papilloma
- b. Duct ectasia
- c. Carcinoma breast
- d. Fibroadenosis

[80] A 45yrs old female presented with hard and mobile lump in the breast. Next investigation is-

- a. FNAC
- b. USG
- c. Mammography
- d. Excision biopsy

[81] Which groups of nodes are called as Delphian nodes?

- a. Pretracheal
- b. Paratracheal
- c. Supraclavicular
- d. Posterior triangle

[82] In which of the following tumour alpha fetoprotein is elevated?

- a. Choriocarcinoma
- b. Neuroblastoma
- c. Hepatocellular Carcinoma
- d. Seminoma



[83] Which of the following is an absolute indication for surgical treatment of a renal injury?

- a. Major urinary extravasation
- b. Vascular injury
- c. Expanding perirenal hematoma
- d. 20% devitalized renal parenchyma

[84] The term universal tumour refers to:

- a. Adenoma
- b. Papilloma
- c. Fibroma
- d. Lipoma

[85] A 22-year-old man sustains severe blunt trauma to the back. He notes that he cannot move his lower extremities. He is hypotensive and bradycardic. Which of the following is the best initial management of the patient?

- a. Administration of steroids
- b. Intravenous fluid bolus
- c. Administration of dopamine
- d. Administration of epinephrine

[86] Which of the following is absolute contraindication to Breast conservative therapy

- a. Pregnancy
- b. Rheumatoid arthritis
- c. Tumor size
- d. Breast size

[87] Beck's Triad includes all Except:

- a. Muffled heart sounds
- b. Raised JVP
- c. Hypotension
- d. Bracycardia

[88] Grey Turner's sign is classically found in

- a. Acute cholecystitis

- b. Choledocholithiasis
- c. Acute appendicitis
- d. Acute haemorrhagic pancreatitis

[89] In a patient following GI surgery, below which level of albumin is an indicator of mortality

- a. <3gm%
- b. <2gm%
- c. <2.5gm%
- d. <1.5gm%

[90] Splenectomy is most useful in:

- a. Sickle cell anemia
- b. Thalassemia
- c. Hereditary spherocytosis
- d. Acquired autoimmune haemolytic anemia

[91] Breast conservation is done in all **Except-**

- a. Young patients
- b. Lobular carcinoma
- c. Ductal carcinoma in situ
- d. Infiltrating ductal carcinoma

[92] Mucinous ascitis is seen in

- a. Abdominal tuberculosis
- b. Nephrotic syndrome
- c. Nephritic syndrome
- d. Carcinoma stomach

[93] Which mesenteric cyst whose removal entails removal of part of intestines also-

- a. Chylolymphatic cyst
- b. Dermoid cyst
- c. Simple cyst
- d. Enterogenous cyst

[94] Commonest cause for pyogenic liver abscess is

- a. Aspiration
- b. Hematogenous spread from distant site
- c. Direct contact
- d. Lymphatic spread

[95] Guaiac test is used for-

- a. Pentosuria
- b. Fructosuria
- c. For occult blood in stool
- d. Pancreatitis

[96] Non progressive contraction of esophagus is

- a. Primary
- b. Secondary
- c. Tertiary
- d. Quaternary

[97] Most common cause for lower gastro intestinal bleed is -

- a. Colorectal carcinoma
- b. Diverticulosis
- c. Angiodysplasia
- d. Anal fissure

[98] Commonest site of peptic ulcer is

- a. Ist part of duodenum
- b. IInd part of duodenum
- c. Distal 1/3 of the stomach
- d. Pylorus of the stomach

[99] The Couinaud's segmental nomenclature is based on the position of the

- a. Hepatic veins and portal vein
- b. Hepatic veins and biliary ducts
- c. Portal vein and biliary ducts

d. Portal vein and hepatic artery

[100] Which of the following organisms produce signs and symptoms that mimic acute appendicitis-

- a. Enteropathic *Escherichia coli*
- b. *Yersinia enterocolitica*
- c. *Enterobius vermicularis*
- d. *Trichomonas hominis*