# Instructions

Mark each question on the answer sheet either True or False with an ‘X’ For example, for the following question:

## 1 Anaphylaxis:

1. Is a potentially life threatening allergic reaction
2. Has a slow onset with slowly progressing symptoms
3. Is not recognized by Airway and/or Breathing and / or Circulation problems
4. often causes flushing, urticaria & angioedema

|  |  |  |
| --- | --- | --- |
| **Question** | **True** | **False** |
| 1a | **X** |  |
| 1b |  | **X** |
| 1c |  | **X** |
| 1d | **X** |  |

The answer grid should be marked:

## During a suspected anaphylaxis:

* 1. Skin and or muscosal changes may be absent in 20% of cases
  2. Life threatening features should be treated using the ABCDE approach
  3. First line treatment consists of IV Adrenaline
  4. A single dose of IM adrenaline poses a serious risk to patients

## During a suspected anaphylaxis:

* 1. Adrenaline is given early for Airway / Breathing / Circulation problems
  2. Can only be given by Healthcare Professionals trained in IM injecting
  3. Is given in the deltoid muscle two finger widths from the acromion process
  4. IM Adrenaline may be repeated 5 minutes later if ABC problems persist

## Early warning scoring systems:

* 1. can be used to help detect patients who are deteriorating
  2. must be calculated before you call for help when you think a patient is about to have a cardiac arrest
  3. work best if the early warning score is acted upon early using an escalation protocol to call for help
  4. use the patient’s observations (e.g. blood pressure, pulse, respiratory rate) to calculate a score

## During Anaphylaxis:

* 1. 11% of all fatal anaphylaxis is caused by IV contrast
  2. It is safe to changes the patients posture form supine to standing or sitting
  3. A hoarse voice may indicate an Airway problem
  4. Signs of shock include a tachycardia and hypotension

## Using Adrenaline for Anaphylaxis:

* 1. The best site for IM injection is the anterolateral aspect of the middle third of the thigh
  2. The needle must be smaller that a 23G (Blue)
  3. 1mg/ml is given at one time and may the be repeated
  4. Guidelines recommend IM as first line in all settings.

## Legal aspects of administration of adrenaline for anaphylaxis

* 1. Adrenaline is a POM and therefore cannot be given without a Patient Specific Directive
  2. May be given by a healthcare professional treating anaphylaxis if it is from an emergency drug supply, e.g. a dedicated emergency trolley or bag
  3. Adrenaline is exempt from Regulation 214 of the Human Medicines Regulations, under regulation 238, “for the purpose of saving life in an emergency”
  4. The healthcare professional must be working within the standards of the relevant regulator or other supervisory body to use Adrenaline.

## Anaphylaxis:

* 1. Is recognized by mild localized skin and or swelling of lips and face
  2. Is recognized by generalized skin reactions
  3. is not present without an ABC problem
  4. lies along a spectrum of severity of symptoms

## Using Adrenaline for Anaphylaxis:

* 1. May increase bronchoconstriction – worsening oxygenation
  2. Is an alpha-receptor agonist, it reverses peripheral vasodilation and reduces tissue oedema
  3. Its beta activity increases the force of myocardial contraction, dilates the bronchial airways and suppresses histamine and leukotriene release
  4. Should never be given to patients with life threatening features – ABC involvement

1. **Appropriate practitioners for writing prescriptions for Prescription Only Medicines are:**

a) Doctors and Nurses

b) Doctors, Supplementary-prescriber Radiographers

c) Doctors and Radiographers with manager’s approval

d) Technologists, Supplementary-prescriber Radiographers

**10.** **Under a Patient Group Direction, medicines may be administered by:**

a) Radiographers only

b) Clinical Scientists and radiographers

c) Radiographers, Technologists and Clinical Scientists

d) Technologists and Radiographers

**11.** **A Patient Specific Direction for administering contrast may be in the form of:**

a) A verbal instruction from a clinician to administer contrast

b) An instruction to administer a medicine to an individually assessed patient,

written in their notes or an electronic record where the prescriber is identifiable

c) A list of named patients sharing the same condition that have not been assessed

individually by the prescriber

d) A list of named patients that have been assessed individually by the prescriber

**12. With regards safety issues of IV contrast media use:**

1. Not having an up to date eGFR is an absolute contraindication for contrast media administration
2. An eGFR result is considered low if under 60ml/min
3. Patients with low eGFR taking metformin may be asked to suspend medication for contrast media administration
4. Risk of post-contrast acute kidney injury in patients with stable eGFR is very low

**13. Prevention of contrast media extravasation should consider the following risks/measures:**

1. Fragile/damaged veins
2. Small administration volumes
3. Infusion rate
4. Size of cannula

**14. When managing an adverse reaction to contrast media administration:**

1. Patients with known asthma must remain under supervision in the department for at least 30 minutes
2. Patients with bronchospasm should be given oxygen by mask
3. Patients with symptoms of nausea should wait 15 minutes under supervision but can be discharged after this period has elapsed
4. An incident report using a Datix system is sufficient to document it

**15. One-stop shop contrast enhanced CT and PET:**

1. Add value to management of patients with non-Hodgkin's lymphoma, but not to patients with diffuse large B-cell lymphoma
2. May be useful in the diagnosis of patients with recurrent ovarian cancer
3. Is not useful in patients with head and neck cancer in the presence of increased tumour markers
4. Is useful in patients with head and neck cancer under investigation for surgical treatment

**16. When implementing a contrast enhanced CT service in a PET/CT department:**

1. Algorithms can be implemented to prevent and minimise risks associated with contrast media administration
2. Checks in place before contrast media administration include - patient ID, potential for renal adverse reaction and referral authorisation
3. Advice to patients and carers must only by provided in a written form
4. Guidance from referrers may be required for patients identified to be at increased risk of renal impairment, including stopping fluids intake and re-check eGFR within 10-14 days of contrast media administration

**17. With regards to imaging protocols for contrast enhanced CT and PET:**

1. Must be optimised to the equipment available in the department and enhancement phases planned according to clinical indication
2. Hepatic or portal venous phase shows liver parenchyma enhancement through blood supply by portal vein and occurs 15 to 20 seconds post injection
3. Contrast media can affect attenuation corrections of PET data due to Hounsfield units in enhanced structures
4. A delayed phase of neck is a particularly useful enhancement phase when imaging lung cancer patients

# MCQ paper 1 – Student answer sheet

**Instructions:**

Mark each question either True of False with an ‘X’ (see question paper for example)

**Name**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Question** | **True** | **False** |  | **Question** | **True** | **False** |
| 1a |  |  | 6a |  |  |
| 1b |  |  | 6b |  |  |
| 1c |  |  | 6c |  |  |
| 1d |  |  | 6d |  |  |
| 2a |  |  | 7a |  |  |
| 2b |  |  | 7b |  |  |
| 2c |  |  | 7c |  |  |
| 2d |  |  | 7d |  |  |
| 3a |  |  | 8a |  |  |
| 3b |  |  | 8b |  |  |
| 3c |  |  | 8c |  |  |
| 3d |  |  | 8d |  |  |
| 4a |  |  | 9a |  |  |
| 4b |  |  | 9b |  |  |
| 4c |  |  | 9c |  |  |
| 4d |  |  | 9d |  |  |
| 5a |  |  | 10a |  |  |
| 5b |  |  | 10b |  |  |
| 5c |  |  | 10c |  |  |
| 5d |  |  | 10d |  |  |

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**Name**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Question** | **True** | **False** |  | **Question** | **True** | **False** |
| 11a |  |  | 16a |  |  |
| 11b |  |  | 16b |  |  |
| 11c |  |  | 16c |  |  |
| 11d |  |  | 16d |  |  |
| 12a |  |  | 17a |  |  |
| 12b |  |  | 17b |  |  |
| 12c |  |  | 17c |  |  |
| 12d |  |  | 17d |  |  |
| 13a |  |  |  |  |  |
| 13b |  |  |  |  |  |
| 13c |  |  |  |  |  |
| 13d |  |  |  |  |  |
| 14a |  |  |  |  |  |
| 14b |  |  |  |  |  |
| 14c |  |  |  |  |  |
| 14d |  |  |  |  |  |
| 15a |  |  |  |  |  |
| 15b |  |  |  |  |  |
| 15c |  |  |  |  |  |
| 15d |  |  |  |  |  |