



قائمة الاسئلة

0) تقنية الرنين المغناطيسي - المستوى الرابع - قسم أشعة - كلية الطب والعلوم الصحية - برامج العلوم الطبية التطبيقية - الفترة الثانية - درجة الامتحان

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- 1) MRI uses all except
  - 1)  x-rays
  - 2) - radio waves
  - 3) - magnetic field
  - 4) - computer
- 2) The first MRI name by Dr. Raymond Damadian was called .....
  - 1) - Ramond's
  - 2) - Magnet
  - 3) - Varian
  - 4)  Indomitable
- 3) Components of MRI scanner are .....
  - 1) - two
  - 2) - three
  - 3)  four
  - 4) - None
- 4) The coil in the MRI scanner acts like .....
  - 1)  Antenna
  - 2) - radio
  - 3) - image receptor
  - 4) - all
- 5) One is not among the three types of Magnets in MRI.
  - 1) - Resistive Magnet
  - 2) - Permanent magnet
  - 3) - Superconducting magnets
  - 4)  Radio magnets
- 6) The most commonly used magnet is .....
  - 1)  Superconducting magnets
  - 2) - Radio magnets
  - 3) - Resistive Magnet
  - 4) - all
- 7) One is not among the three types of MRI.....
  - 1)  Exceptional closed MRI
  - 2) - Traditional closed MRI
  - 3) - Opened MRI
  - 4) - Standing / Sitting MRI
- 8) High-field MRI Machines generate magnetic field strenrth ..... Tesla.
  - 1) - 0.5T - 1.0T
  - 2) - 1.0T - 1.5T
  - 3) - 1.5T - 2.0T
  - 4)  1.5T - 3.0T
- 9) Low-field MRI Machines generate magnetic field strenrth ..... Tesla.
  - 1)  0.2T - 0.5T
  - 2) - 1.0T - 1.5T
  - 3) - 1.5T - 2.0T
  - 4) - 1.5T - 3.0T





- 10) High-Resolution MRI machines are used for imaging the .....
- 1) - Brain
  - 2)  small bones of the hand and foot
  - 3) - Abdomen
  - 4) - None
- 11) Open MRI is applied for all except these .....
- 1)  Tall patients
  - 2) - Claustrophobic patients
  - 3) - have difficulty in lying still
  - 4) - Obese patients
- 12) To diagnose seizures / memory problems, we use ..... to diagnose.
- 1)  EEG
  - 2) - NIRS
  - 3) - PET
  - 4) - None
- 13) For all arthrogram MRIs, be sure to arrive ..... minutes before the scan.
- 1)  90 minutes
  - 2) - 60 minutes
  - 3) - 30 minutes
  - 4) - none
- 14) For MRIs that need anesthesia, sedation, and biopsy, be sure to arrive .....
- 1) - 90 minutes
  - 2)  60 minutes
  - 3) - 3 days
  - 4) - 4 days
- 15) Smoking should be stopped two hours before scan, because it .....
- 1)  affects the blood flow
  - 2) - blurs the image
  - 3) - patient can not breathe
  - 4) - None
- 16) MRI is contraindicated for a pregnant woman in her .....
- 1)  First Trimester
  - 2) - Second trimester
  - 3) - Third trimester
  - 4) - All
- 17) Gadolinium is contraindicated for .....
- 1)  All pregnant women
  - 2) - First Trimester
  - 3) - Second trimester
  - 4) - Third trimester
- 18) MRI is contraindicated for all except for those who have .....
- 1) - Bullets and shrapnel
  - 2) - tattoos / dark skin tattoos
  - 3) - prosthesis / dentures
  - 4)  none
- 19) The noise created by the MRI machine is caused by the .....
- 1)  gradient coil
  - 2) - patient
  - 3) - contrast media





- 4) - all
- 20) The patient can stop the scan if he feels uncomfortable using ..... .
- 1)  panic button
  - 2) - call button
  - 3) - emergency stop
  - 4) - all
- 21) All are among the disadvantages of MRI, except ..... .
- 1) - very expensive
  - 2) - fears claustrophobic patients
  - 3) - very loud
  - 4)  Very clear images for the tissues
- 22) T1 - weighed MRI enhances the signal of .....
- 1)  fatty tissues
  - 2) - water
  - 3) - gases
  - 4) - none
- 23) T2 - weighed MRI enhances the signal of .....
- 1)  water
  - 2) - fatty tissues
  - 3) - gases
  - 4) - none
- 24) CSF is ..... on T1 - weighed imaging.
- 1)  dark
  - 2) - white
  - 3) - blue
  - 4) - none
- 25) Fatty tissues are ..... on T1 - weighed imaging.
- 1)  bright
  - 2) - dark
  - 3) - blue
  - 4) - none
- 26) Dosage of GBCA is .....
- 1)  0.1 mmol/kg
  - 2) - 1.0 mmol/kg
  - 3) - 10.00 mmol/kg
  - 4) - all
- 27) NSF is a serious renal condition caused by .....
- 1)  GBCA
  - 2) - MRI magnets
  - 3) - noise of the coils
  - 4) - none
- 28) Parameters such as repetition time (TR), echo time (TE), flip angle, and field of view (FOV) are adjusted so as to optimize .....
- 1) - image contrast
  - 2) - resolution
  - 3) - scan time
  - 4)  all
- 29) In Brain MRI, T1 - weighed imaging provides .....
- 1)  detailed anatomical information





- 2) - Sensitive pathology  
3) - clear visualization of the fluid  
4) - None
- 30) The use of FLAIR in Brain MRI is to .....
- 1) - detailed anatomical information  
2) - Sensitive pathology  
3)  clear visualization of the fluid  
4) - None
- 31) Fasting during Abdominal MRI is quite helpful because it will .....
- 1)  minimizes bowel motion artifacts during imaging  
2) - images will be an acceptable  
3) - patient might feel restless  
4) - none
- 32) A moderately full bladder helps in visualizing the .....
- 1)  pelvic structures more clearly  
2) - the urinary bladder clearly  
3) - show the stones in the U.B.  
4) - None
- 33) The patient is asked to fill his / her bladder by letting him / her drink ..... 1 - 2 before the sca.
- 1) - 200 - 350 ml of water  
2) - 300 - 450 ml of water  
3) - 400 - 550 ml of water  
4)  500 - 750 ml of water
- 34) The dosage of GBCA is typically calculated based on the .....
- 1)  Patient's weight  
2) - patients's condition  
3) - type of investigation  
4) - None
- 35) A patient that weights 105 kg, needs GBCA ..... for his MRI scan.
- 1)  10.5 mmol/kg  
2) - 105 mmol/kg  
3) - 1.05 mmol/kg  
4) - none

