STUDENT REVIEW
QUESTION SET G
RANDOM CONTENT AREA

RADT 2913
COMPREHENSIVE REVIEW
Patients who experience cramping during an enema procedure should be instructed to
A. take slow, deep breaths
B. increase their breathing rate
C. curl into a fetal position on their side
D. hold their breath and bear down (Valsalva)
Patients who experience cramping during an enema procedure should be instructed to

A. take slow, deep breaths
B. increase their breathing rate
C. curl into a fetal position on their side
D. hold their breath and bear down (Valsalva)
The primary purpose for using personnel monitors is to
A. protect the radiographer
B. monitor a radiographer's repeat rate
C. indicate a radiographer's occupational exposure
D. calculate the total amount of radiation a radiographer delivers
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A. protect the radiographer
B. monitor a radiographer's repeat rate
C. indicate a radiographer's occupational exposure
D. calculate the total amount of radiation a radiographer delivers
The right anterior oblique position of the cervical spine will best demonstrate the
A. vertebral foramen
B. spinous processes
C. intervertebral foramina of the left side
D. intervertebral foramina of the right side
The right anterior oblique position of the cervical spine will best demonstrate the
A. vertebral foramen
B. spinous processes
C. intervertebral foramina of the left side
D. intervertebral foramina of the right side
According to NCRP Report No. 91, what is the maximum dose equivalent for the occasionally (nonoccupationally) exposed worker?

A. 0.5 mSv (0.05 rem)
B. 5 mSv (0.5 rem)
C. 50 mSv (5 rem)
D. 500 mSv (50 rem)
According to NCRP Report No. 91, what is the maximum dose equivalent for the occasionally (nonoccupationally) exposed worker?

A. 0.5 mSv (0.05 rem)
B. 5 mSv (0.5 rem)
C. 50 mSv (5 rem)
D. 500 mSv (50 rem)
Which radiographic procedure may be performed for its therapeutic value as well as its diagnostic capability?

A. Myelography
B. Arthrography
C. Lymphography
D. Hysterosalpingography
Which radiographic procedure may be performed for its therapeutic value as well as its diagnostic capability?

A. Myelography
B. Arthrography
C. Lymphography
D. Hysterosalpingography
An artifact appearing as a minus density is caused by what action?
A. Creasing of the film during handling
B. Scratching away of the emulsion
C. Static discharges while the film is being handled
D. Increased sensitization of the film due to deposits on a roller
An artifacts appearing as a minus density is caused by what action?

A. Creasing of the film during handling

B. Scratching away of the emulsion

C. Static discharges while the film is being handled

D. Increased sensitization of the film due to deposits on a roller
The axial projection of the calcaneus requires the CR to be directed
A. perpendicular to the image receptor
B. $25^\circ$ cephalad entering the dorsum of the foot
C. $30^\circ$ caudad entering the dorsum of the foot
D. $40^\circ$ cephalad entering the plantar surface of the foot
The axial projection of the calcaneus requires the CR to be directed

A. perpendicular to the image receptor
B. 25° cephalad entering the dorsum of the foot
C. 30° caudad entering the dorsum of the foot
D. 40° cephalad entering the plantar surface of the foot
In the lateral position, the sphenoid sinuses are located directly
A. posterior to the maxillary
B. inferior to the frontal sinuses
C. posterior to the ethmoid sinuses
D. anterior to the ethmoid sinuses
In the lateral position, the sphenoid sinuses are located directly

A. posterior to the maxillary sinuses
B. inferior to the frontal sinuses
C. posterior to the ethmoid sinuses
D. anterior to the ethmoid sinuses
Which statement is true regarding battery-operated mobile x-ray units?

A. They produce a constant potential (output)
B. Kilovoltage drops over the course of the exposure
C. They employ a DC chopper to create an AC waveform
D. They must be plugged into an AC outlet during exposure
Which statement is true regarding battery-operated mobile x-ray units?

A. They produce a constant potential (output)
B. Kilovoltage drops over the course of the exposure
C. **They employ a DC chopper to create an AC waveform**
D. They must be plugged into an AC outlet during exposure
The likelihood of an allergic reaction is greatest following the IV administration of
A. barium sulfate
B. oil-based iodine
C. ionic, water-soluble iodine
D. nonionic, water-soluble iodine
The likelihood of an allergic reaction is greatest following the IV administration of

A. barium sulfate
B. oil-based iodine
C. ionic, water-soluble iodine
D. nonionic, water-soluble iodine
The number of true ribs (those which attach to the sternum) that make up the bony thorax is

A. 5
B. 8
C. 10
D. 14
The number of true ribs (those which attach to the sternum) that make up the bony thorax is

A. 5
B. 8
C. 10
D. 14 -- 7 pairs = 14
Intensifying screens are used with radiographic film to:

A. improve definition
B. allow longer exposures
C. reduce patient exposure
D. increase radiographic latitude
Intensifying screens are used with radiographic film to:
A. improve definition
B. allow longer exposures
C. reduce patient exposure
D. increase radiographic latitude
What type of unethical behavior or violation of a patient’s rights occurs if you detain a patient from departing the department or hospital?

A. Invasion of privacy  
B. Battery on a patient  
C. False imprisonment  
D. Failure to provide informed consent
What type of unethical behavior or violation of a patient’s rights occurs if you detain a patient from departing the department or hospital?

A. Invasion of privacy
B. Battery on a patient
C. False imprisonment
D. Failure to provide informed consent
The cribriform plate is located on which of the following bones?

A. Frontal
B. Ethmoid
C. Temporal
D. Sphenoid
The cribriform plate is located on which of the following bones?

A. Frontal
B. Ethmoid
C. Temporal
D. Sphenoid
From what portion of a sensitometric curve is D-max (maximum density) obtained?
A. toe
B. base
C. shoulder
D. straight line portion
From what portion of a sensitometric curve is D-max (maximum density) obtained?

A. toe
B. base
C. shoulder
D. straight line portion
When transferring a patient from a portable oxygen source to a fixed wall outlet in the radiographic room, what factor must be determined?

A. Patient's need to be suctioned first
B. Oxygen flow rate set on portable tank
C. The type of oxygen appliance to change to
D. Quantity of oxygen available from the wall source
When transferring a patient from a portable oxygen source to a fixed wall outlet in the radiographic room, what factor must be determined?

A. Patient's need to be suctioned first
B. Oxygen flow rate set on portable tank
C. The type of oxygen appliance to change to
D. Quantity of oxygen available from the wall source
How is the cumulative exposure limit calculated according to NCRP No. 91?
A. 10 mSv x age
B. 50 mSv x age
C. 10 mSv x (age - 18)
D. 50 mSv x (age - 18)
How is the cumulative exposure limit calculated according to NCRP No. 91?

A. $10 \text{ mSv} \times \text{age}$
B. $50 \text{ mSv} \times \text{age}$
C. $10 \text{ mSv} \times (\text{age} - 18)$
D. $50 \text{ mSv} \times (\text{age} - 18)$
In order to best demonstrate the interphalaneal joints of the foot in the dorsoplantar projection, the CR should be directed

A. $5^\circ$ toward the toes
B. $5^\circ$ toward the heel
C. $15^\circ$ toward the toes
D. $15^\circ$ toward the heel
In order to best demonstrate the interphalangeal joints of the foot in the dorsoplantar projection, the CR should be directed
A. 5° toward the toes
B. 5° toward the heel
C. 15° toward the toes
D. 15° toward the heel
In comparison to an adult, the difference in chest compressions on a child or infant is to
A. compress at a slower rate
B. compress deeply with two hands
C. compress the sternum less deeply
D. perform the maneuver from the prone position
In comparison to an adult, the difference in chest compressions on a child or infant is to
A. compress at a slower rate
B. compress deeply with two hands
C. compress the sternum less deeply
D. perform the maneuver from the prone position
The radiographic density is primarily controlled and regulated by:
A. SID  
B. kVp  
C. mAs  
D. focal spot size
The radiographic density is primarily controlled and regulated by:

A. SID
B. kVp
C. **mAs**
D. focal spot size

Kawamura

RADT 2913 (Item Set G)
What position should be used when a patient feels faint?
A. Sims position
B. Trendelenburg
C. Fowler position
D. Ventral decubitus
What position should be used when a patient feels faint?
A. Sims position  
B. Trendelenburg  
C. Fowler position  
D. Ventral decubitus
Conversion of the energy of the radiographic beam into visible light is accomplished by the:

A. processing chemistry
B. phosphor of the intensifying screen
C. silver halide crystals of the film emulsion
D. reflective layer of the intensifying screen
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A. processing chemistry  
B. phosphor of the intensifying screen  
C. silver halide crystals of the film emulsion  
D. reflective layer of the intensifying screen
Cholecystography is the radiographic examination of the

A. bile ducts
B. gallbladder
C. hepatic vessels
D. gallbladder and bile ducts
Cholecystography is the radiographic examination of the
A. bile ducts
B. gallbladder
C. hepatic vessels
D. gallbladder and bile ducts

Chole = bile.  
Cysto = bladder.
What exposure factors would you change to compensate for imaging soft tissue only?

A. Increase kilovoltage
B. Decrease kilovoltage
C. Increase milliampere-seconds
D. Decrease milliampere-seconds
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A. Increase kilovoltage
B. Decrease kilovoltage
C. Increase milliampere-seconds
D. Decrease milliampere-seconds
What is the most common source of fire in a radiology department?
A. Cigarettes
B. Open flames
C. Electrical components
D. Spontaneous combustion
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A. Cigarettes
B. Open flames
C. Electrical components
D. Spontaneous combustion
For an anteroposterior thoracic spine projection, the image receptor is centered to:
A. T-3
B. T-7
C. T-9
D. T-12
For an anteroposterior thoracic spine projection, the image receptor is centered to:

A. T-3
B. T-7
C. T-9
D. T-12
According to national regulatory regulations, if only one personnel monitoring device is issued, where should it be worn when performing routine radiography procedures?

A. At collar level
B. On the wrist
C. At waist level
D. Wherever it is convenient
According to national regulatory regulations, if only one personnel monitoring device is issued, where should it be worn when performing routine radiography procedures?

A. At collar level
B. On the wrist
C. At waist level
D. Wherever it is convenient

When a protective apron is not worn (NCRP No. 102)
Poor film-screen contact results in radiographic areas of:

A. definition
B. low density
C. unsharpness
D. high contrast
Poor film-screen contact results in radiographic areas of:
A. definition
B. low density
C. unsharpness
D. high contrast
Exhausted fixer may cause all the following problems EXCEPT:

A. brittle film
B. tacky finished films
C. milky appearance of the image
D. continued darkening of the film during storage
Exhausted fixer may cause all the following problems EXCEPT:

A. **brittle film**
B. tacky finished films
C. milky appearance of the image
D. continued darkening of the film during storage
The articulations of the vertebral column are primarily of which type?
A. Hinge
B. Gliding
C. Saddle
D. Cartilaginous
The articulations of the vertebral column are primarily of which type?

A. **Hinge**
B. **Gliding**
C. **Saddle**
D. **Cartilaginous**
What is the primary purpose for using intensifying screens in film-screen radiography?
A. Decrease patient dose
B. Improve recorded detail
C. Increase image contrast
D. Decrease processing time
What is the primary purpose for using intensifying screens in film-screen radiography?

A. Decrease patient dose
B. Improve recorded detail
C. Increase image contrast
D. Decrease processing time
What exposure factors would you change to compensate for callus formation?

A. Increase kilovoltage
B. Decrease kilovoltage
C. Increase milliampere-seconds
D. Decrease milliampere-seconds
What exposure factors would you change to compensate for callus formation?

A. Increase kilovoltage
B. Decrease kilovoltage
C. Increase milliampere-seconds
D. Decrease milliampere-seconds
Which of the following statements is true regarding the position of the kidney within the abdomen?
A. Upper pole of kidney is anterior to lower pole
B. Lower pole of kidney is anterior to upper pole
C. Upper and lower poles are in the same coronal plane
D. Any of the above could be true
Which of the following statements is true regarding the position of the kidney within the abdomen?

A. Upper pole of kidney is anterior to lower pole
B. Lower pole of kidney is anterior to upper pole
C. Upper and lower poles are in the same coronal plane
D. Any of the above could be true
In which part of the x-ray circuit will the rectification system be located?
A. In the filament circuit
B. Prior to the autotransformer
C. Between the secondary side of the high-tension transformer and x-ray tube
D. Between the autotransformer and the primary side of the high-tension transformer
What name does Kodak give their exposure indicator?

A. Exposure Index (EI)
B. “S” number
C. lGm
D. latitude
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In which part of the x-ray circuit will the rectification system be located?

A. In the filament circuit
B. Prior to the autotransformer
C. Between the secondary side of the high-tension transformer and x-ray tube
D. Between the autotransformer and the primary side of the high-tension transformer
Chest radiography requires the central ray to enter the patient at the level of
A. T-5
B. T-7
C. T-9
D. the xiphoid process
Chest radiography requires the central ray to enter the patient at the level of:

A. T-5
B. T-7
C. T-9
D. the xiphoid process
Which situation will result in the most serious contamination of processor solutions?

A. Fixer spilled into developer
B. Developer spilled into fixer
C. Fixer spilled into wash water
D. Developer spilled into wash water
Which situation will result in the most serious contamination of processor solutions?

A. Fixer spilled into developer
B. Developer spilled into fixer
C. Fixer spilled into wash water
D. Developer spilled into wash water
A drop in blood pressure due to extensive blood loss describes what type of emergency medical situation?

A. Shock  
B. Head injury  
C. Cardiac arrest  
D. Respiratory distress
A drop in blood pressure due to extensive blood loss describes what type of emergency medical situation?

A. **Shock**
B. Head injury
C. Cardiac arrest
D. Respiratory distress
What structure is the most posterior on the vertebral arch and is most prominent on C7?
A. Spinous process  
B. Vertebral foramen  
C. Transverse process  
D. Intervertebral foramen
What structure is the most posterior on the vertebral arch and is most prominent on C7?

A. Spinous process
B. Vertebral foramen
C. Transverse process
D. Intervertebral foramen
Twice as many electrons strike the target in the x-ray tube when:
A. kVp is doubled
B. mAs is doubled
C. SID is reduced by $\frac{1}{2}$
D. OID is reduced by $\frac{1}{2}$
Twice as many electrons strike the target in the x-ray tube when:

A. kVp is doubled
B. mAs is doubled
C. SID is reduced by \( \frac{1}{2} \)
D. OID is reduced by \( \frac{1}{2} \)
A patient who is experiencing syncope has
A. fainted
B. dizziness
C. a nosebleed
D. uncontrolled bleeding
A patient who is experiencing syncope has

A. fainted
B. dizziness
C. a nosebleed
D. uncontrolled bleeding
What exposure factors would you change to compensate for Paget's disease?

A. Increase kilovoltage
B. Decrease kilovoltage
C. Increase milliampere-seconds
D. Decrease milliampere-seconds
What exposure factors would you change to compensate for Paget's disease?

A. Increase kilovoltage
B. Decrease kilovoltage
C. Increase milliampere-seconds
D. Decrease milliampere-seconds
The proper pH level for the developer solution is
A. acidic
B. alkali
C. neutral
D. liberating
The proper pH level for the developer solution is
A. acidic
B. alkali
C. neutral
D. liberating
The inion is located in which of the following bones?
A. Frontal
B. Occipital
C. Temporal
D. Sphenoid
The inion is located in which of the following bones?

A. Frontal  
B. Occipital  
C. Temporal  
D. Sphenoid
What type of radiation effect causes radiation induced malignancies?
A. Genetic
B. Late somatic
C. Photoelectric
D. Early somatic
What type of radiation effect causes radiation induced malignancies?
A. Genetic
B. Late somatic
C. Photoelectric
D. Early somatic
A screen's spectral emission refers to the:

A. screen lag or afterglow
B. color of light a phosphor will produce
C. quantity of light a phosphor will produce
D. range of x-ray energies to which the phosphor is sensitive
A screen's spectral emission refers to the:

A. screen lag or afterglow
B. color of light a phosphor will produce
C. quantity of light a phosphor will produce
D. range of x-ray energies to which the phosphor is sensitive
Positioning for the PA axial projection of the paranasal sinuses requires the
A. orbitomeatal line perpendicular and CR angled 20° caudad
B. orbitomeatal line perpendicular and CR angled 15° caudad
C. infraorbitomeatal line perpendicular and CR angled 20° caudad
D. infraorbitomeatal line perpendicular and CR angled 15° caudad
Positioning for the PA axial projection of the paranasal sinuses requires the

A. orbitomeatal line perpendicular and CR angled 20° caudad

B. orbitomeatal line perpendicular and CR angled 15° caudad

C. infraorbitomeatal line perpendicular and CR angled 20° caudad

D. infraorbitomeatal line perpendicular and CR angled 15° caudad
Which of the following test results is within the range of tolerance for the component evaluated?

A. A stated focal spot of 0.6 mm measures 0.9 mm
B. A selected kilovoltage of 80 yields a measured kilovoltage of 86
C. A spinning top test yields 8 dots for selected exposure time of 0.05 s
D. X-ray/light field alignment varies by 3 cm toward the head of the table at SID of 40 inches
Which of the following test results is within the range of tolerance for the component evaluated?

A. A stated focal spot of 0.6 mm measures 0.9 mm

B. A selected kilovoltage of 80 yields a measured kilovoltage of 86

C. A spinning top test yields 8 dots for selected exposure time of 0.05 s

D. X-ray/light field alignment varies by 3 cm toward the head of the table at SID of 40 inches
Why is it recommended that a pillow or sponge be placed under a supine patient's knees?

A. To improve circulation in the lower limbs
B. To relieve stress on patient's lower back
C. To keep patients from rolling off the table
D. To keep legs together when patient is being moved
Why is it recommended that a pillow or sponge be placed under a supine patient's knees?

A. To improve circulation in the lower limbs
B. To relieve stress on patient's lower back
C. To keep patients from rolling off the table
D. To keep legs together when patient is being moved
CR has ______________ dynamic range than/as film.

A. greater.
B. less
C. the same
D. none of the above
CR has ________________
dynamic range than/as film.

A. greater
B. less
C. the same
D. none of the above
The purpose of life is a life of purpose.

Robert Byrne