Chapter 26

1. Which of the following are recommended areas for standardization within the imaging department:
2. Radiographic projection routines
3. Exposure factors
4. Image processing parameters
5. All of the above
6. None of the above
7. Standardizing and simplifying technique:
8. Increases consistency
9. Narrows the range of potential causes of equipment failures
10. Reduces the probability of errors
11. All of the above
12. None of the above
13. For digital radiography, the textbook generally recommends the *variable kVp* approach for techniques, but it is important that mAs be changed instead of kVp if:
14. Violating the minimum kVp rule may result in inadequate penetration
15. Scatter radiation may be produced
16. Body part thickness changes
17. Consistent image brightness is desired
18. Using the “base-60” method for variable kVp, what would be the calculated kVp for a body part measuring 14 cm:
19. 28 kVp
20. 60 kVp
21. 74 kVp
22. 88 kVp
23. 102 kVp
24. For distal extremity and skull procedures, a well-made technique chart for “average” patients would be usable without any modification on what percentage of all adult patients:

a. 50%

b. 66%

c. 75%

d. more than 90%

6. Even for body torso procedures, an “average” technique will be usable without modification

for what percentage of all adult patients?

a. 25%

b. 33%

c. 50%

d. 67%

e. 80%

7. A premature baby has a body torso shape which is circular rather than oval in cross-section. On this patient, for radiography of the chest, when changing from the AP to the lateral projection what overall technique adjustment should be made from the AP technique?

a. 4 times

b. 3 times

c. double

d. use about the same technique

8. For the average adult torso, to maintain adequate exposure at the image receptor, a full 45-

degree oblique position will require what change in technique from the AP projection?

a. 50% increase

b. double

c. 4 times

d. 5 times

9. Within a given procedure, if possible, the only variable to be changed from one projection to

the next should be:

a. kVp

b. mA

c. exposure time

d. phase

10. The only *disadvantage* to using the same optimum mA station throughout a particular

radiographic procedure is the:

a. probability of patient motion

b. heat load on the anode

c. complication of setting technique

d. poor calibration of mA stations

11. With digitized imaging, the use of a variable-kVp, high-kVp approach to radiograph

technique:

a. can save patient exposure

b. can frequently present fog in the final image

c. results in wildly variable contrast in the final image

d. all of these

e. none of these

12. The most important reason to use technique charts is that:

a. more consistent radiographic quality is achieved

b. professionalism is enhanced

c. departmental costs for repeats can be cut

d. radiation exposure to patients can be cut

13. It is recommended for completeness that the torso procedures on a technique chart be

organized into columns for every cm change in part thickness:

a. 1

b. 2

c. 4

d. 5

e. 10

14. Which of the following is *not* a recommended policy for technique charts:

a. allow all radiographers using it to have input into its development

b. keep equipment calibrated

c. update the chart every 6 months

d. allow individual radiographers to change the written techniques

15. The development of radiographic techniques should be:

a. by trial and error

b. considered an art

c. a systematic science of estimation

d. left by managers to the staff technologists

16. Which of the following is used properly only in conjunction with measuring calipers?

a. manual technique charts

b. automatic exposure technique charts

c. both of these

d. neither of these

17. Which of the following is *never* a necessary item for an automatic exposure technique chart?

a. back-up exposure time

b. photocell configuration

c. kVp

d. mAs

18. Using proportional anatomy, when changing from an average AP pelvis projection to an

average AP lumbar spine, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

19. Using proportional anatomy, when changing from an average AP cervical spine projection to

an average AP shoulder, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

20. Using proportional anatomy, when changing from an average AP elbow projection to a PA

wrist, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

21. Using proportional anatomy, when changing from an average AP ankle projection to an

AP knee, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. quadruple

d. cut to one-fourth

e. use equal technique

22. Using proportional anatomy, when changing from an average AP lumbar spine projection to a true 45-degree lumbar spine, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

23. Using proportional anatomy, when changing from an AP foot projection to the lateral foot,

adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

24. Using proportional anatomy, when changing from an average AP projection for a barium

enema to a 30-degree oblique projection, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. increase by 50%

d. cut by 30%

e. use equal technique

25. Using proportional anatomy, when changing from a PA skull projection to a lateral skull,

adjust *overall* technique as follows:

a. double

b. cut to one-half

c. quadruple

d. cut to one-fourth

e. use equal technique

26. Using proportional anatomy, when changing from an average AP abdomen projection to an

average Townes projection of the skull, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

27. Using proportional anatomy, when changing from an average AP cervical spine projection to

a lateral skull, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique

28. Using proportional anatomy, when changing from an average PA chest projection to the

lateral chest, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. quadruple

d. cut to one-fourth

e. use equal technique

29. Using proportional anatomy, when changing from an AP chest projection on a healthy 6-

month old baby to the lateral chest, adjust *overall* technique as follows:

a. double

b. cut to one-half

c. triple

d. cut to one-third

e. use equal technique