CONTINUING EDUCATION TEST: SNM Practice Guideline for Parathyroid Scintigraphy 4.0

1. Hyperparathyroidism is characterized by all of the following except an…
   A. Increase in serum calcium.
   B. Increase release of parathyroid hormone.
   C. Increase in serum inorganic phosphates.
   D. Increase in synthesis of parathyroid hormone.

2. An indication for parathyroid scintigraphy is…
   A. Localizing hyperplasia in primary hyperparathyroidism.
   B. Localizing tertiary hyperfunctioning parathyroid tissue.
   C. Localizing hypofunctioning parathyroid tissue in patients with persistent disease.
   D. Localizing hypofunctioning tissue in patients with recurrent disease.

3. Patients undergoing parathyroid scintigraphy require…
   A. A low-iodine diet for 3–4 wk before the procedure.
   B. Fasting for 2 h before the procedure.
   C. A low-calcium diet for 3–4 wk before the procedure.
   D. No special preparation.

4. In the dual-isotope parathyroid imaging procedure, the combination of the radiopharmaceuticals may include all of the following except…
   A. $^{99m}Tc$-pertechnetate and $^{99m}Tc$-tetrafosmin.
   B. $^{123I}$-sodium iodide and $^{99m}Tc$-sestamibi.
   C. $^{99m}Tc$-tetrafosmin and $^{99m}Tc$-sestamibi.
D. $^{99m}$Tc-pertechnetate and $^{99m}$Tc-sestamibi.

5. Mediastinal images are especially helpful in cases with…
   A. Concurrent nodular thyroid disease.
   B. Hyperplastic glands.
   C. Residual or recurrent disease.
   D. Parathyroid adenomas smaller than 500 mg.

6. When $^{123}$I-sodium iodide is used with a $^{99m}$Tc-radiopharmaceutical in a dual-imaging parathyroid scintigraphy protocol, administration of the radiopharmaceutical…
   A. Should be first because of its lower administered activity.
   B. Should be first because of its short time for localization.
   C. Should be administered 10 min before the second injection.
   D. Can be injected either first or second because the $\gamma$-energies are different.

7. Sources of error include all of the following except…
   A. Thyroid adenomas and carcinoma.
   B. Hyperplastic parathyroid glands larger than 500 mg.
   C. Previous thyroidectomy.
   D. Recently administered radiographic contrast media.

8. With respect to parathyroid scintigraphy, there is a consensus that…
   A. Subtraction imaging is better than dual-phase imaging.
   B. PET imaging is probably helpful in finding a cause for a low parathyroid hormone level.
C. SPECT/CT is most useful in quantifying the physiologic extent of disease.
D. $^{201}$Tl-chloride should no longer be used for this study.

9. The instructions given to a nursing woman undergoing parathyroid scintigraphy using $^{123}$I-sodium iodide should include…
A. Stop breast feeding 1 d before the procedure so calcium levels are not disturbed.
B. Reassurance that it is safe to continue breast feeding as usual before and after the administration.
C. A 12-h interruption time in breast feeding after the administration.
D. A more than 3-wk interruption time in breast feeding after the administration.

10. Information on possible placental crossover exists for…
A. $^{99m}$Tc-pertechnetate and $^{99m}$Tc-tetrafosmin.
B. $^{123}$I-sodium iodide and $^{99m}$Tc-sestamibi.
C. $^{99m}$Tc-tetrafosmin and $^{99m}$Tc-sestamibi.
D. $^{99m}$Tc-pertechnetate and $^{123}$I-sodium iodide.