Technetium-99m-Teboroxime: A New Agent for Myocardial Perfusion Imaging

For each of the following questions, select the best answer. Then circle the reader service card number that corresponds to the answer you have selected. Keep a record of your responses so that you can compare them with the correct answers, which will be published in the next issue of the *Journal*. Answers to these test questions should be returned on the reader service card no later than June 1, 1991. Supply your name, address, and VOICE number in the spaces provided on the card. Your VOICE number appears on the upper left hand corner of your *Journal* mailing label. No credit can be recorded without it. A 70% correct response rate is required to receive 0.1 CEU credit for this article. Members participating in the continuing education activity will receive documentation on their VOICE transcript, which is issued in March of each year. Nonmembers may request verification of their participation but do not receive transcripts.

A. *Researchers have worked toward the development of a ^{99m}Tc-labeled myocardial perfusion agent because it is:*

216. less expensive.
217. an optimal energy.
218. readily available.
219. a short half-life nuclide.
220. 217, 218, and 219.
221. all of the above.

B. *A high myocardial extraction with rapid myocardial uptake and low target-to-non-target ratios are ideal properties for a ^{99m}Tc-labeled agent.*

222. True
223. False

C. *For a complete stress/rest myocardial perfusion study with ^{99m}Tc-teboroxime, two separate injections of the radiopharmaceutical is necessary due to:*

224. the accelerated breakdown of the radiopharmaceutical.
225. the shorter half-life of ^{99m}Tc.
226. the shorter myocardial residence time.
227. increased imaging times.

D. *The target organ(s) for ^{99m}Tc-teboroxime is(are):*

228. stomach.
229. gallbladder wall.
230. myocardium.
231. small and large intestines.
232. thyroid.
233. 229 and 230.
234. 229 and 231.
235. all of the above.

E. *Technetium-99m-teboroxime compared favorably to both coronary artery angiography and stress-thallium imaging in the detection of coronary artery disease.*

236. True
237. False

F. *The following will reduce the radiochemical purity of ^{99m}Tc-teboroxime if added to the reaction vial:*

238. ^{99m}Tc pertechnetate.
239. 0.9% NaCl.
240. nitrogen.
241. room air.

G. *Preparation of the ^{99m}Tc-teboroxime kit includes:*

242. heating at 100°C for 15 min.
243. cooling preparation to room temperature.
244. vial kept in an upright position.
245. chromatography must be performed.
246. 242, 243, and 245.
247. all of the above.

H. *The recommended single dose of ^{99m}Tc-teboroxime is:*

248. 5–30 mCi.
249. 10–40 mCi.
250. 15–50 mCi.
251. 20–60 mCi.

I. *When performing a stress and a rest study the recommended total dosage is not to exceed:*

252. 50 mCi.
253. 55 mCi.
254. 60 mCi.
255. 65 mCi.

J. *After administration of ^{99m}Tc-teboroxime during exercise, imaging of the myocardium should begin:*

256. immediately.
257. within 2 min.
258. within 4 min.
259. within 6 min.
260. none of the above.

K. *To minimize hepatic interference and improve visualization of the inferior wall when using ^{99m}Tc-teboroxime:*

261. acquire the anterior image first.
262. begin acquisition 4 min after injection.
263. perform the resting study prior to the stress.
264. image the patient in the upright position.

L. *The suggested time interval between the injections of ^{99m}Tc-teboroxime for the rest and stress studies is:*

265. ½ hr.
266. 1 hr.
267. 3 hr.
268. 4 hr.

M. *For static planar imaging, it is desirable to acquire at least ___ K counts per view.*

269. 300.
270. 600.
271. 800.
272. 1000.

N. *The organ(s) that (has) have the greatest uptake of ^{99m}Tc-teboroxime 5–10 min postinjection is(are):*

273. lungs.
274. heart.
275. spleen.
276. liver.
277. 275 and 276.

O. *During the acquisition of either the 70° LAO or left lateral projections, the ___ wall of the myocardium may be obscured.*

278. anterior
279. posterior
280. septal
281. inferior
282. lateral

P.

Myocardial imaging with ^{99m}Tc-teboroxime must be completed within ___ min post-injection.

283. 10
284. 20
285. 30
286. 40

Answers to CE Article Tests, December 1990

The Continuing Education article "PET Imaging in Neurology," by Karl Hubner was accompanied by a CE article test. The correct answers are:

A. 105	D. 116	G. 129	J. 140	M. 154
B. 109	E. 120	H. 133	K. 147	
C. 114	F. 125	I. 137	L. 151	

The answers to the CE test on "Investigational New Drugs: Application, Process, and Trial," by Geoffrey Levine and Neil Abel are:

A. 159	D. 170	G. 186	J. 198	M. 203
B. 163	E. 173	H. 189	K. 200	N. 205
C. 165	F. 180	I. 194	L. 201	