Supplement for normal values of ^{123}I-MIBG studies

Cardiac ^{123}I-MIBG Imaging for Clinical Decision Making: 22-Year Experience in Japan

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J Nucl Med 2015

Heart-to-mediastinum ratios in the control groups in the literature of Japan (*1-12*) and in Europe and USA (*13-23)* are listed.

1. Nakajima K, Taki J, Tonami N, Hisada K. Decreased 123I-MIBG uptake and increased clearance in various cardiac diseases. *Nucl Med Commun.* 1994;15(5):317-323.

2. Takeishi Y, Sukekawa H, Sakurai T, et al. Noninvasive identification of anthracycline cardiotoxicity: comparison of 123I-MIBG and 123I-BMIPP imaging. *Ann Nucl Med.* 1994;8(3):177-182.

3. Suwa M, Otake Y, Moriguchi A, et al. Iodine-123 metaiodobenzylguanidine myocardial scintigraphy for prediction of response to beta-blocker therapy in patients with dilated cardiomyopathy. *Am Heart J.* 1997;133(3):353-358.

4. Nakata T, Miyamoto K, Doi A, et al. Cardiac death prediction and impaired cardiac sympathetic innervation assessed by MIBG in patients with failing and nonfailing hearts. *J Nucl Cardiol.* 1998;5(6):579-590.

5. Orimo S, Ozawa E, Nakade S, Sugimoto T, Mizusawa H. (123)I-metaiodobenzylguanidine myocardial scintigraphy in Parkinson's disease. *J Neurol Neurosurg Psychiatry.* 1999;67(2):189-194.

6. Yano T, Yamabe H, Yokoyama M. Washout rate of 123I-metaiodobenzylguanidine increased by posture change or exercise in normal volunteers. *Ann Nucl Med.* 1999;13(2):89-93.

7. Fukuoka S, Nakagawa S, Fukunaga T, Yamada H. Effect of long-term atrial-demand ventricular pacing on cardiac sympathetic activity. *Nucl Med Commun.* 2000;21(3):291-297.

8. Mu X, Hasegawa S, Yoshioka J, et al. Clinical value of lung uptake of iodine-123 metaiodobenzylguanidine (MIBG), a myocardial sympathetic nerve imaging agent, in patients with chronic heart failure. *Ann Nucl Med.* 2001;15(5):411-416.

9. Arimoto T, Takeishi Y, Fukui A, et al. Dynamic 123I-MIBG SPECT reflects sympathetic nervous integrity and predicts clinical outcome in patients with chronic heart failure. *Ann Nucl Med.* 2004;18(2):145-150.

10. Nagayama H, Hamamoto M, Ueda M, Nagashima J, Katayama Y. Reliability of MIBG myocardial scintigraphy in the diagnosis of Parkinson's disease. *J Neurol Neurosurg Psychiatry.* 2005;76(2):249-251.

11. Sakata K, Iida K, Kudo M, Yoshida H, Doi O. Prognostic value of I-123 metaiodobenzylguanidine imaging in vasospastic angina without significant coronary stenosis. *Circ J.* 2005;69(2):171-176.

12. Kasama S, Toyama T, Hatori T, et al. Evaluation of cardiac sympathetic nerve activity and left ventricular remodelling in patients with dilated cardiomyopathy on the treatment containing carvedilol. *Eur Heart J.* 2007;28(8):989-995.

13. Claus D, Feistel H, Brunholzl C, Platsch G, Neundorfer B, Wolf F. Investigation of parasympathetic and sympathetic cardiac innervation in diabetic neuropathy: heart rate variation versus meta-iodo-benzylguanidine measured by single photon emission computed tomography. *Clin Auton Res.* 1994;4(3):117-123.

14. Merlet P, Benvenuti C, Moyse D, et al. Prognostic value of MIBG imaging in idiopathic dilated cardiomyopathy. *J Nucl Med.* 1999;40(6):917-923.

15. Cohen-Solal A, Esanu Y, Logeart D, et al. Cardiac metaiodobenzylguanidine uptake in patients with moderate chronic heart failure: relationship with peak oxygen uptake and prognosis. *J Am Coll Cardiol.* 1999;33(3):759-766.

16. Delahaye N, Dinanian S, Slama MS, et al. Cardiac sympathetic denervation in familial amyloid polyneuropathy assessed by iodine-123 metaiodobenzylguanidine scintigraphy and heart rate variability. *Eur J Nucl Med.* 1999;26(4):416-424.

17. Druschky A, Hilz MJ, Platsch G, et al. Differentiation of Parkinson's disease and multiple system atrophy in early disease stages by means of I-123-MIBG-SPECT. *J Neurol Sci.* 2000;175(1):3-12.

18. Agostini D, Belin A, Amar MH, et al. Improvement of cardiac neuronal function after carvedilol treatment in dilated cardiomyopathy: a 123I-MIBG scintigraphic study. *J Nucl Med.* 2000;41(5):845-851.

19. Marketou ME, Simantirakis EN, Prassopoulos VK, et al. Assessment of myocardial adrenergic innervation in patients with sick sinus syndrome: effect of asynchronous ventricular activation from ventricular apical stimulation. *Heart.* 2002;88(3):255-259.

20. Parthenakis FI, Prassopoulos VK, Koukouraki SI, et al. Segmental pattern of myocardial sympathetic denervation in idiopathic dilated cardiomyopathy: relationship to regional wall motion and myocardial perfusion abnormalities. *J Nucl Cardiol.* 2002;9(1):15-22.

21. Somsen GA, Verberne HJ, Fleury E, Righetti A. Normal values and within-subject variability of cardiac I-123 MIBG scintigraphy in healthy individuals: implications for clinical studies. *J Nucl Cardiol.* 2004;11(2):126-133.

22. Cha YM, Oh J, Miyazaki C, et al. Cardiac resynchronization therapy upregulates cardiac autonomic control. *J Cardiovasc Electrophysiol.* 2008;19(10):1045-1052.

23. Chen J, Folks RD, Verdes L, Manatunga DN, Jacobson AF, Garcia EV. Quantitative I-123 mIBG SPECT in differentiating abnormal and normal mIBG myocardial uptake. *J Nucl Cardiol.* 2012;19(1):92-99.