

ing reduction in its specific binding to alpha-1 receptor sites; however, we observed that, in rats, the thalamus/cerebellum and frontal cortex/cerebellum activity ratios were the same, within experimental error ($n = 4$), for both the no carrier-added and the carrier-added [^{123}I]HEAT. Owing to the shorter half-life and higher energies of [^{123}I] compared to [^{125}I], this reduction in specific activity does not exclude such radiopharmaceuticals from use in nuclear medicine.

Although this paper describes the synthesis of a single radiopharmaceutical, the principles discussed above should be applicable to the syntheses of other radiopharmaceuticals using isotopes with high specific activities and, as a result, low numbers of molecules.

Acknowledgments

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Reference

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Pediatric Brain Imaging with Technetium-99m-HM-PAO and SPECT

TO THE EDITOR: Garty et al. (1) published a review on pediatric imaging with emphasis on nuclear medicine, magnetic resonance imaging (MRI) and other radiological procedures, mainly computed tomography (CT). Under the subsection cerebral vascular diseases, on clinical applications in the central nervous system, little reference is made to new radiopharmaceuticals now widely available. The importance of a technetium-99m ($^{99\text{m}}\text{Tc}$) tracer to study regional brain perfusion with single photon emission computerized tomography (SPECT) is in our opinion underestimated. Technetium-99m HM-PAO has been used in clinical routine in Europe since 1985 mainly to investigate patients with cerebrovascular disease (2). Its normal distribution in vivo was described for normal man. Its regional brain distribution (on SPECT studies) correlates well with the anatomic localization of structures

where higher and lower perfusion rates are expected (3). The Food and Drug Administration (FDA) has recently approved its introduction in the U.S.A. as a brain perfusion radiotracer to study cerebrovascular disease.

We have found that [$^{99\text{m}}\text{Tc}$]HM-PAO/SPECT investigation of the brain perfusion in pediatric patients with cerebrovascular disease adds an important and objective parameter to the definition of the underlying pathophysiology.

References

1. Garty I, Delbeke D, Sandler MP. Correlative pediatric imaging. *J Nucl Med* 1989; 30:15-42.
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3. Costa DC, Ell PJ, Cullum ID, Jarritt PH. The *in vivo* distribution of $^{99\text{m}}\text{Tc}$ -HM-PAO in normal man. *Nucl Med Commun* 1986; 7:647-658.

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REPLY: We would like to thank Drs. Costa and Ell for their letter regarding the clinical capabilities of [$^{99\text{m}}\text{Tc}$]HM-PAO and SPECT in pediatric patients. We are in total agreement with the authors' comments and will no doubt see a significant increase in the number of [$^{99\text{m}}\text{Tc}$]HM-PAO studies being performed in children now that this radiopharmaceutical has been approved by the FDA for routine clinical use in the United States.

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Correction: Radioisotope Penile Plethysmography: A Technique for Evaluating Corpora Cavernosa Blood Flow During Early Tumescence

In the article by Schwartz, Graham, Ferency, et al, "Radioisotope Penile Plethysmography: A Technique for Evaluating Corpora Cavernosa Blood Flow During Early Tumescence," (*J Nucl Med* 1989;30: 466-473), an error occurred on p. 470. In the second column, second paragraph, the sentence reading "The change in volume ranged from 16 ml to 18 ml (mean 43.4 21.5) should read "... ranged from 16 ml to 65 ml (mean 43.4 ml)."