

FIGURE 2. Dopamine transporter SPECT images obtained on different camera showed normalization after 7 wk without dextroamphetamine and amphetamine.

DISCUSSION

The patient's initial dopamine transporter SPECT study, obtained while she was taking amphetamines for attentiondeficit hyperactivity disorder, was positive for Parkinson disease, but the repeated study, obtained after amphetamines had been withheld for 7 wk, was negative for Parkinson disease. This case demonstrates that therapeutic doses of amphetamines can significantly alter dopamine transporter imaging. Our findings are consistent with animal models showing that methylphenidate—which, like dextroamphetamine and amphetamine, reduces dopamine transporter availability—decreases the dopamine transporter SPECT signal (4).

For patients taking amphetamines, a 1-wk washout period has been recommended before dopamine transporter SPECT (1). However, even after 2 wk of abstinence, recreational users of dextroamphetamine have been shown to have a lower striatal SPECT signal than healthy controls (5). Although one case is not sufficient to determine an optimal washout period, 7 wk was used here for normalization of dopamine transporter imaging.

CONCLUSION

An accurate medical history and knowledge of medications that interfere with dopamine transporter imaging are critical to ensure that drugs are properly withheld beforehand.

DISCLOSURE

Phillip H. Kuo has consulted for and received grants from GE Healthcare. No other potential conflict of interest relevant to this article was reported.

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Erratum

In the March issue, we accidentally reprinted a JRCNMT report from a previous issue (*J Nucl Med Technol.* 2018;46:9A–14A). The correct report appears in this issue. We regret the error.