Phantom kidney: A CT correlation

Teruhito Mochizuki, Martin Charron, Ajit N. Shah and W. Newlon Tauxe

Department of Radiology, Division of Nuclear Medicine, University of Pittsburgh School of Medicine

The phantom kidney is a "kidney-like" apparition which may be seen in dynamic renal scintigraphy typically in post-nephrectomy patients or in patients with unilateral renal agenesis. We report a case of a phantom kidney demonstrated in the angiographic phase of renal scintigraphy with $^{99m}$Tc-dimercaputosuccinic acid ($^{99m}$Tc-DMSA) in a patient who was nephrectomized 14 years previously. After comparison with the CT images, we conclude that our patient's finding was caused by an increased mesenteric vascularity, possibly post-prandial. Several conditions which may cause the phantom kidney effect, have been reported, but increased mesenteric vascularity seems to be the most common cause.

Key words: technetium-99m-DMSA, renal scintigraphy, nephrectomy, phantom kidney