Figure 1

CT images of a phantom consisting of a 25 cm diameter cylinder with vials of contrast medium concentrations of 0, 0.625, 1.25, 2.5 and 5 mgl/mL of iodixanol imaged at 80 kVp, 140 kVp, combined and DE subtraction techniques. These images were used to generate calibration curves that correlated the gray scale intensity on the CT images to known iodine concentrations in mgl/ml.



Figure 2

Calibration curves relating grayscale intensity to iodine concentration. The combined image has a calibration with a similar curve to that derived from dual energy subtraction, but with a constant offset (yintercept) of approximately 32 HU.



Figure 3

Manual segmentation ROI of the kidney parenchyma, excluding the collecting system and renal sinus. Images were viewed at a window of 300 and a level of 55 during segmentation.

