CT imaging acquisition

Abdominal CT scans were gained using a 64-slice scanner (Somatom, Defifinition AS, Siemens, Germany) in patients who had fasted at least 6 hours. In order to achieve gastric distension, the patients were encouraged to drink 500-800 ml of tap water prior to CT examination. The scans covering the upper or the entire abdomen were performed in a cranio-caudal direction in each patient during a breath-hold. The CT scanning parameters were as follows: tube voltage 120 kVp, tube current 160 mAs, rotation time 0.5 seconds, slice thickness 5.0 mm, slice interval 5.0 mm and matrix size 512x512. In all patient, non-ionic contrast agent (3.0~3.5 ml/s, 1.5 ml/kg body weight, Ultravist, Bayer healthcare, Berlin, Germany) was injected via the antecubital vein with a syringe pump. Contrast-enhanced scans were performed at 7s (arterial phase) and 47s (Parenchymal phase) after the trigger threshold (100 Hounsfield units) was reached at abdominal aorta. The primary CT images were reconstructed with slice thickness of 1.5 mm for subsequent analysis.