

General Principles of DECT

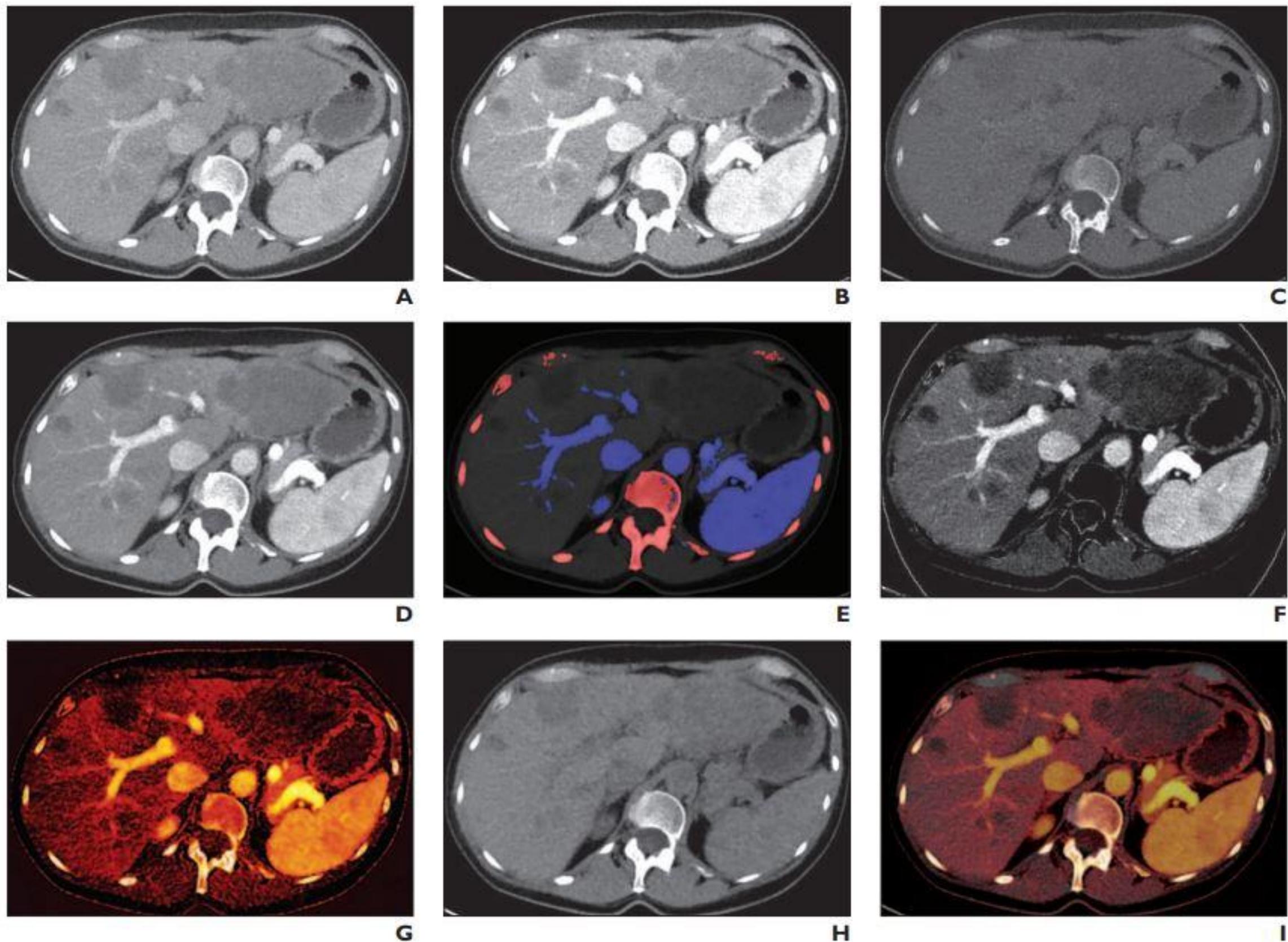


Fig. 4—Clinical example dataset obtained on dual-source CT scanner using 0.4-mm stannum filter at 140 kVp and 71 mAs and 100 kVp and 69 mAs with overall CT dose index of 5.7 mGy. Images were generated with Syngo dual-energy software (version VE32B, Siemens Healthcare) of 72-year-old woman with liver metastasis from colorectal cancer.

- A, Image acquired at 140 kVp using stannum filter.
- B, Image acquired at 100 kVp.
- C, Quasi monoenergetic image extrapolated to 140 keV.
- D, Optimum contrast image after "sigmoidal blending."
- E, Algorithm differentiates iodine (blue) from calcium (red).
- F, Angiographic image after bone removal.
- G, Algorithm quantifies iodine by color-coding iodine in orange.
- H, Virtual unenhanced image after iodine subtraction.
- I, Fusion of color-coded iodine image and unenhanced image.