Movies captions

**Movie 2a**

CT-scan of the right wrist of a 20-year-old man during the preoperative assessment of a parachute trauma with 3D reformation in Volume Rendering. Note the good analysis of the bone structures thanks to 3D reformations in spite of the important reduction of the acquisition parameters (volume acquisition in 200 x 0.5 mm, 80 kV, 50 mAs, rotation time 0.5s) and scan dose (DLP = 39.3 mGy.cm and effective dose = 0.008 mSv).

**Movies 6a and 6b**

Dynamic CT scan of the subtalar joint of the right ankle of a 39-year-old woman presenting with a calcification of cervical ligament of the sinus tarsi. Examination performed with a 320-detector row CT with acquisition of seven dynamic phases during eversion/inversion motion of the ankle (120 kV, 75 mAs, rotation time 0.5s, DLP = 811 mGy.cm, corresponding to an effective dose of 0.6 mSv). Dynamic coronal reformations focused on the subtalar joint during the eversion/inversion motion of the ankle (movie 6a) and 3D Volume Rendering reformations in eversion and inversion (movie 6b) showing the range of motion of the right ankle. In spite of the ligament calcification, this dynamic study shows a conservation of the articular range of motion.

**Movie** 7

Dynamic CT-arthrography of the left wrist of a 57-year-old man presenting with scapholunate and luno-triquetral ligament tears. Examination performed with a 320-detector row CT during a radio-ulnar deviation motion with successive acquisitions of eight volumes (scan length of 10 cm, 80 kV, 17 mAs, rotation time of 0.35s, corresponding to an acquisition time of 2.8 seconds, DLP = 133 mGy.cm and an effective dose of approximately 0.1 mSv). Frontal reformations in 1.5 mm slices in radio-ulnar deviation motion of the wrist. Note the increase of the scapho-lunate gap with the ulnar deviation of the wrist.

**Movie 8**

Tumor perfusion CT of an osteoid osteoma in the left femoral diaphysis of a 38-year-old patient, with 0.5 mm axial slice after contrast injection and with bone subtraction. The acquisition was performed with a 320-detector row CT with a 16 cm coverage, with 15 phases (first phase without injection, then nine phases every five seconds and five phases every 10 seconds), 120 kV, 75 mAs and rotation time of 0.5s, DLP = 495 mGy.cm. Note the good visualization of the nidus thanks to the bone subtraction images, confirming the early arterial contrast enhancement also shown by the CT tumor perfusion curve.

**Movie 9**

Tumor perfusion CT-scan of a schwannoma of the forearm in a 51-year-old woman. 3D reformation in Volume Rendering. The acquisition was performed with a 320-detector row CT in volume mode with 240 x 0.5 mm, 12 cm coverage, 80 kV, 50 mAs, and rotation time of 0.5s, acquisition of a first phase without injection, then an intermittent acquisition of nine phases every five seconds, then of five phases every 10 seconds. The total DLP for 15 phases is 590 mGy.cm. The vascular reformations allow for a better analysis of the ratio between the tumor and the vessels and to assist in preoperative planning.