Appendix E-1

Methods: Imaging Protocol

Because the study was conducted over a five-year period, magnetic resonance imaging scanners and protocols varied slightly. Magnetic resonance arthrography was performed with use of either a General Electric LX Lightning 1.5T, a Siemens MAGNETOM Symphony 1.5T, or a Siemens MAGNETOM Avanto 1.5T unit. Arthrography was performed with use of Omniscan, a gadolinium-based contrast agent, diluted to 1:200 in a mixture of 5 mL of Isovue 200 contrast medium, 5 mL of 1% lidocaine, and 10 mL of 0.5% bupivacaine. Between 10 and 20 mL of this mixture was injected, depending on joint distensibility and patient discomfort. Magnetic resonance imaging scanning was then performed with use of coronal T1-weighted sequences (repetition time, 500 ms; echo time, 12 ms), coronal T2-weighted sequences with fat saturation (repetition time, 3000 to 4000 ms; echo time, 65 to 85 ms), axial three-dimensional gradient-echo sequences with fat saturation (repetition time, 16 ms; echo time, 7 ms; flip angle, 10°), and sagittal T1-weighted or proton-density sequences. Slice thickness was 4 mm for spin-echo sequences and 1.25 mm for gradient-echo sequences. At a PACS (picture archiving and communications system) workstation, oblique sagittal reformations angled to the femoral neck were generated from the three-dimensional gradient-echo sequence.