CHIEF COMPLAINT AND HISTORY OF PRESENT ILLNESS

This patient is a 42-year-old woman who had an acute twisting event and developed the onset of medial-sided right knee pain. She continued to complain of persistent right knee medial-sided weight-bearing pain and discomfort in addition to activity-related swelling. Her symptoms were not alleviated by a trial of antiinflammatory medication as well as a course of physical therapy.

PHYSICAL EXAMINATION

Height, 5ft, 4in.; weight, 155lb. She has an antalgic gait. Her right knee has a moderate effusion. Her range of motion is 0 to 130 degrees. She is tender to palpation over the medial joint line and femoral condyle. Meniscal findings are equivocal, with pain reported with a varus axial load and rotation, but no palpable click. Her ligament examination is within normal limits.

RADIOGRAPHIC EVALUATION

Plain radiographs were unremarkable (Figure C11.1). A magnetic resonance image (MRI) was obtained and found to be within normal limits.

SURGICAL INTERVENTION

Initially, it was believed that she had a medial meniscus tear and was therefore indicated for arthroscopy. At arthroscopy, she was diagnosed as having an isolated grade III to IV chondral defect measuring 12mm by 12mm in the weight-bearing zone of the medial femoral condyle. As this was the only pathology identified, it was treated with an isolated microfracture technique (Figure C11.2). Postoperatively, the patient was made nonweight bearing for approximately 6 weeks and was placed on continuous passive motion for a similar period of time. She did well for approximately the first 8 months. As her activity level increased, however, she developed activity-related effusions and persistent medial-sided symptoms.
Figure C11.1. Anteroposterior (A) and lateral (B) radiographs of patient with a symptomatic medial femoral condyle chondral lesion diagnosed at arthroscopy, but with no evidence of defect demonstrated by plain radiographs or MRI.

Because of persistent symptoms, she was indicated for osteochondral autograft transplantation of the medial femoral condyle. At the time of surgery, there was significant fibrocartilage fill of the medial femoral condyle, which was replaced with a 10-mm osteochondral autograft harvested from the lateral aspect of the trochlea (Figure C11.3).

Figure C11.2. (A) Arthroscopic photograph of a grade III to grade IV lesion of the weight-bearing zone of the medial femoral condyle with delamination. (B) Microfracture technique used to treat this lesion.