Metastatic Knee

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A 39-year-old woman with breast cancer was admitted with progressive bilateral knee pain. Five years earlier, a 3.5 cm primary breast lesion was detected, including one positive axillary lymph node, and she received 4 cycles of chemotherapy. Three years before admission, metastatic disease was detected in the lumbar spine; additional chemotherapy followed.

She now presented with increasingly intolerable right greater than left knee pain, which was intolerable upon weight-bearing and ambulation. Medications included ibuprofen, oxycodone, pregabalin, and paroxitene. Examination revealed a sedated woman with alopecia. Temperature was 37.8°C. Heart, lung, and abdominal findings were unremarkable. There was no synovitis affecting the small joints of the hands. Passive range of motion was well tolerated at the wrists, elbows, shoulders, and ankles. In contrast, passive bilateral knee motion was greatly impaired. Both knees were warm and full with obscured joint landmarks. Knee radiograph disclosed diffuse osteoblastic disease affecting the femoral condyles and tibial plateaus (Figure 1). Bone scintigraphy revealed severe widespread metastatic disease, including at both femurs and tibias. Palliative care was implemented.

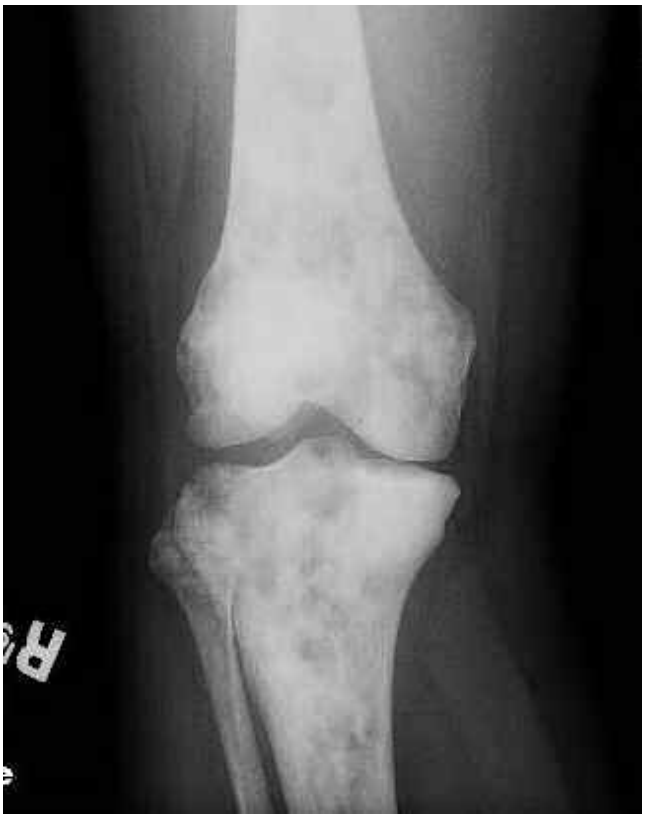

Figure 1. Diffuse blastic disease of the right knee affecting the femoral condyles and tibial plateaus.

The presence of knee effusions in the context of the clinical course and radiologic findings compellingly implicated metastatic infiltration of the knees. Notably, carcinomatous metastatic arthritis may result from direct tumor infiltration to bone and produce an effusion in the adjacent joint space[1]. Alternately, a malignant joint effusion might follow from direct metastatic involvement of the synovial lining[2,3]. Although uncommon, joint effusions in the appropriate clinical context may be a consequence of metastatic cancer.

REFERENCES

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