For many patients, bone marrow biopsy is a dreaded procedure. In addition to it being uncomfortable, if not painful, patients experience anxiety that the results may mean further treatment and yet another confrontation with one’s mortality. Bone marrow biopsy is a diagnostic procedure commonly used to (a) detect and stage malignancy, (b) differentiate benign hematologic diseases (e.g., aplastic anemia, Waldenstrom macroglobulinemia), and (c) evaluate progression of human immunodeficiency virus. Traditionally, physicians have performed this procedure, with the nurse present for assistance and as a source of emotional support for patients. As the role of the advanced practice nurse (APN) in oncology has evolved, specially trained nurse practitioners (NPs) and, in some states, certified baccalaureate nurses now perform bone marrow aspiration and biopsy independently. Training requirements vary by institution but include satisfaction of competencies that address responsibility and accountability issues. After observing a physician or certified member of the medical team, APNs must successfully perform several supervised and independent demonstrations of the procedure. These nurses play a key role in obtaining bone marrow samples, supporting patients during the procedure, and teaching patients about the results. This article presents information about bone marrow examination, techniques for collection, and procedural pain management. With this knowledge, nurses can more effectively help their patients through an anxious time and enhance their understanding of their diagnosis.