scan, which is being used increasingly in certain types of pediatric malignancies, such as neuroblastoma and soft tissue tumors. Interventional radiology is playing an increasing role in the diagnosis and management of pediatric malignancies.

Pathologic Evaluation

A biopsy is necessary to establish the diagnosis of a malignancy. Besides determining what type of cancer the patient has, this tissue sample can also be sent for various biologic studies that define the patient's prognosis and allow health care providers to tailor therapy according to the risk group. For example, a bone marrow biopsy determines whether the patient has acute lymphocytic leukemia or acute myelocytic leukemia and also tells what specific subtype of leukemia the patient has and how aggressively it should be treated. Similarly, patients with neuroblastoma undergo a biopsy of the tumor to establish the diagnosis and to evaluate the tumor for *N-myc* amplification, which determines the type of treatment they receive.

Treatment Modalities

The use of multimodal therapy consisting of surgery, chemotherapy, and radiotherapy; enrollment of large numbers of children in cooperative group clinical trials or protocols; and improvements in supportive care have greatly increased the survival of children with cancer. Eighty percent of these patients are now expected to be cured of their disease.

Current efforts are aimed at increasing the survival of patients with high-risk tumors, decreasing the acute and long-term side effects of treatment, and studying the biology of the diseases to better identify patients who are at different risk levels for disease recurrence and can therefore benefit from risk-adapted therapies.

Surgery

The main goal of surgery, besides obtaining biopsies, is to remove all traces of the tumor and restore normal body functioning. Surgery is most successful when the tumor is encapsulated and localized (confined to the site of origin). It may be used for palliative care when the cancer is regional (metastasized to an area