

Therapeutic Management

All rhabdomyosarcomas are high-grade tumors with the potential for metastases. Therefore, multimodal therapy is recommended for all patients. Complete removal of the primary tumor is advocated whenever possible. However, because the tumor is chemosensitive, radical procedures with high morbidity should be avoided. In the majority of cases, a biopsy is followed by chemotherapy, irradiation, or both.

Nursing Care Management

The nursing responsibilities are similar to those for other types of cancer, especially the solid tumors when surgery is employed. Specific objectives include careful assessment for signs of the tumor, especially during well-child examinations; preparation of the child and family for the multiple diagnostic tests; and supportive care during each stage of multimodal therapy. The reader is urged to review [Chapter 17](#) for emotional support of the family in the event of a poor prognosis.

Retinoblastoma

Retinoblastoma, which arises from the retina, is the most common intraocular malignancy of childhood ([Dimaras, Kimani, and O Dimba, 2012](#)). Approximately 4 cases per 1 million children occur annually in the United States ([National Cancer Institute, 2015f](#)). The average age of the child at the time of diagnosis is 2 years old, and bilateral and hereditary disease is diagnosed earlier than unilateral and nonhereditary disease ([Hurwitz, Shields, Shields, et al, 2016](#)). Of all cases of retinoblastoma, 60% are unilateral and nonhereditary, 25% are bilateral and hereditary, and 15% are unilateral and hereditary ([National Cancer Institute, 2015f](#)).

Retinoblastoma may be caused by various genetic alterations of the *Rb* gene, including a somatic mutation in nonhereditary cases, a germ-line mutation in hereditary cases, or a chromosomal deletion involving chromosome 13. A “two-hit hypothesis” was developed to explain genetic and sporadic cases and states that as few as two mutational events are required for tumor initiation. Children who have chromosome aberrations and retinoblastoma also often have an increased incidence of cognitive impairment and congenital