Cancer is the major cause of death in children and adolescents. According to the 2015 Korea Central Cancer Registry data, 1,353 children and adolescents (< 18 years) were diagnosed with cancer. Solid tumor comprises almost half of the cancer cases, with brain tumor being the most common tumor type. Solid tumors in children and adolescents are different from those of adults in clinical features and diversity of cellular origins. In adults, cancer rates tend to increase rapidly with increasing age. However, incidence pattern of childhood solid tumor follows an age-specific pattern. In early childhood, embryonal type solid tumors are common, such as retinoblastoma, neuroblastoma, hepatoblastoma, Wilms tumor, and medulloblastoma. In adolescents, solid tumors often arise from bone and soft tissues (osteosarcoma, Ewing sarcoma), germ cells (germ cell tumor) and epithelial cells (thyroid carcinoma).

Development of risk-oriented therapies and supportive care has greatly improved the survival of children and adolescents with cancer. In Korea, the 5-year survival rates were improved from 54.6% in 1995 to 82.9% in 2015. As in adult cancers, treatment of children and adolescents with solid tumor adopts multidisciplinary approach comprising curative surgery, chemotherapy, and radiotherapy. The best chance of cure lies in the initial diagnosis of cancer, and treatment of progressing or recurrent tumor remains challenging. For pediatric solid tumors, 20%–40% of patients succumb to disease. Numerous attempts have been made to improve the prognosis of these patients, including high-dose chemotherapy (HDCT). For embryonal type solid tumors, HDCT treatment approach improved the survival of some patients. However, the prognosis of relapsed/progressed pediatric solid tumor is still unfavorable.

The improvement in survival of children with cancer could be achieved through the understanding of tumor biology and prospective clinical studies. However, progress is lagged in solid tumors of children and adolescents. There might several reasons; small number of patients, diversity of tumor types, and limited resources. Collaborative group studies are required to overcome these limitations. In North America, the Children's Oncology Group (COG) Every Child Project supports clinical and biologic research for solid tumors and provides status update for patients treated at each COG institutions. The Korean Society of Pediatric Hematology and Oncology has recently initiated nationwide, multi-institutional...
prospective clinical studies for various solid tumors. To design clinical trials, background data are necessary to help identify potential candidates for novel therapies. In this *Journal of Korean Medical Science* issue, Cho et al.\(^6\) report the treatment outcomes of children and adolescents with relapsed or progressed solid tumors. Given the scarcity of reports regarding the clinical features and outcome of relapsed/progressed pediatric solid tumors, their valuable data could be used in designing future clinical trials.

**REFERENCES**


