

Principles and Practice of Pediatric Oncology

Rebecca Anna*

Division of Hematology/Oncology, Children's Hospital of Michigan, Beaubien, USA

Corresponding author: Rebecca Anna, Division of Hematology/Oncology, Children's Hospital of Michigan, Beaubien, USA, E-mail: Anna_R@Led.US

Received date: May 29, 2023, Manuscript No. IPJPC-23-17392; **Editor assigned:** June 01, 2023, PreQC No. IPJPC-23-17392 (PQ); **Reviewed date:** June 15, 2023, QC No. IPJPC-23-17392; **Revised date:** June 22, 2023, Manuscript No. IPJPC-23-17392 (R); **Published date:** June 29, 2023, DOI: 10.4172/2469-5653.9.2.180

Citation: Anna R (2023) Principles and Practice of Pediatric Oncology. J Pediatr Vol.9 No.2: 180

Description

Pediatric oncology is a specialized branch of medicine that focuses on the diagnosis, treatment and management of cancer in children and adolescents. It deals with various types of cancers that affect children, including leukemia, brain tumors, neuroblastoma, wilms tumor, lymphoma and sarcomas, among others. Pediatric oncologists are medical doctors who have received specialized training in the field of pediatric oncology. They work closely with a multidisciplinary team of healthcare professionals, including pediatric surgeons, radiation oncologists, pediatric nurses, social workers, psychologists, and other support staff, to provide comprehensive care to young cancer patients.

Pediatric oncologists utilize various diagnostic tools and techniques, such as blood tests, imaging studies (X-rays, CT scans, MRIs), biopsies, and bone marrow aspirations, to determine the presence and extent of cancer in children. Treatment approaches in pediatric oncology typically involve a combination of therapies, including chemotherapy, radiation therapy, surgery, targeted therapy, immunotherapy, and stem cell transplantation. The treatment plan is tailored to the specific type of cancer, stage of the disease, and individual patient factors.

Pediatric oncologists and the healthcare team provide comprehensive supportive care to manage the side effects and complications of cancer treatment. This may include pain management, nutritional support, psychosocial support, and palliative care to improve the quality of life for the child and their family. Pediatric oncologists monitor the long-term effects of cancer treatment and provide follow-up care to childhood cancer survivors. Regular surveillance is crucial to detect potential late effects and address any on-going medical or psychosocial needs. Pediatric oncology involves active research to advance knowledge and develop new treatment modalities for childhood cancers. Clinical trials are conducted to evaluate the effectiveness and safety of new therapies specifically designed for children with cancer. Pediatric oncology aims to not only treat the cancer but also address the unique emotional, developmental, and social needs of young patients and their families throughout the cancer journey.

Psychosocial Support

Adolescents, also known as teenagers, are individuals who are in the transitional stage between childhood and adulthood. This stage typically encompasses the ages of 10 to 19 years. Adolescence is characterized by significant physical, cognitive, emotional, and social changes as young individuals mature and develop their identities. In the context of pediatric oncology, adolescents can be affected by cancer and require specialized care. Adolescents with cancer face unique challenges compared to younger children or adult patients. Some key considerations in the care of adolescents with cancer include:

Adolescence is a critical period of physical, cognitive, and emotional development. Healthcare providers need to consider the specific developmental needs of adolescents when designing treatment plans and providing supportive care. This may involve engaging adolescents in decision-making, respecting their autonomy, and addressing their concerns about body image, self-identity, and social relationships.

Treatment approaches for adolescents with cancer may differ from those used for younger children or adults. Pediatric oncologists may incorporate therapies that are more suitable for this age group, such as age-appropriate chemotherapy regimens or targeted therapies. Additionally, fertility preservation options should be discussed with adolescents and their families before initiating treatment. Adolescents with cancer often experience unique psychosocial challenges, including disruptions in school, social relationships, and the development of their independence. Psychosocial support, such as counselling services, peer support groups, and educational support, is crucial to address their emotional well-being, alleviate anxiety and depression, and foster social connections.

As adolescents transition into adulthood, they may need to transfer their care from pediatric oncology to adult oncology services. This transition process should be carefully planned and coordinated to ensure continuity of care, appropriate management of long-term effects of cancer treatment, and support in navigating the adult healthcare system. Adolescent cancer survivors require long-term follow-up care to monitor for late effects of treatment, address any on-going medical or psychosocial needs, and provide guidance for transitioning into

adulthood. Survivorship programs tailored to adolescents can help facilitate this transition and provide comprehensive care beyond the completion of cancer treatment. The field of adolescent oncology aims to address the specific needs and challenges faced by adolescents with cancer, recognizing their unique developmental stage and supporting their overall well-being during and after cancer treatment.

Pediatric Oncology

Psychosocial support refers to the provision of emotional, social, and practical assistance to individuals facing challenges related to their mental and emotional well-being, social functioning, and overall quality of life. In the context of pediatric oncology, psychosocial support plays a vital role in helping children, adolescents, and their families cope with the emotional and social impact of cancer diagnosis, treatment, and survivorship. Emotional support involves providing a safe and empathetic environment where patients and their families can express their feelings, fears, and concerns related to cancer. This support can be provided by healthcare professionals, psychologists, social workers, and counselors who specialize in pediatric oncology. It may include individual counseling, support groups, and therapeutic interventions aimed at enhancing coping mechanisms and emotional resilience.

Providing accurate and age-appropriate information about cancer, treatment options, and potential side effects is crucial in empowering patients and families to make informed decisions. Clear communication about the disease process, treatment plan, and expectations can help alleviate anxiety and foster a sense of control and understanding. Connecting patients and families

with others who have similar experiences can be incredibly valuable. Peer support programs, either in person or online, enable individuals to share their stories, exchange advice, and find solace in knowing they are not alone in their journey. Peer support can help reduce feelings of isolation, provide practical tips, and offer a sense of community. Pediatric oncology teams often collaborate with educators and school systems to ensure that children and adolescents with cancer can continue their education during treatment. This may involve providing educational support, developing individualized education plans, facilitating home tutoring, or helping with school re-entry after treatment. Cancer treatment can place a significant financial burden on families. Psychosocial support may involve connecting families with financial resources, assistance programs, and organizations that provide practical support, such as transportation assistance, accommodation near treatment centers, and access to necessary medical equipment.

Pediatric oncology affects not only the diagnosed child but also their siblings and parents. Addressing the needs of the entire family unit is essential. Support programs that focus on siblings can provide a platform for them to express their concerns and receive guidance on coping with the challenges they may face. Family counselling can help strengthen communication, provide strategies for managing stress, and promote overall family well-being. Psychosocial support in pediatric oncology is an integral part of comprehensive care, aiming to enhance the overall quality of life for patients and families throughout the cancer journey. By addressing emotional, social, and practical needs, it helps promote resilience, improve coping strategies, and foster a sense of hope and well-being.