exposure groups. Screening guidelines recommend frequency-adapted (based on cumulative cardiotoxic exposures) echocardiography to facilitate early identification of cardiomyopathy as well as attention to modifiable cardiovascular disease risk factors and health behaviors. This presentation will provide an overview of cardiotoxic cancer treatment modalities and current approaches to prevent cardiac disease and preserve cardiac function.

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Sp06

TRANSFUSION IN PEDIATRIC ONCOLOGY

Suheyla Ocak

IUC, Cerrahpasa Faculty of Medicine, Department of Pediatric Hematology and Oncology

Transfusion of blood components is a critical – life-saving - part of the care of children with hematologic and oncologic diseases. According to studies, pediatric oncology patients account for approximately 25% of all inpatient pediatric transfusions in clinical practice. Pediatric oncology patients may require multiple transfusions of blood components, including red cells, platelets, and plasma, due to underlying disease, bone marrow suppression, and therapy-related bleeding. There are few studies that specifically address transfusion in the pediatric oncology patient population. Recently, some recommendation papers or guidelines have been adopted in the literature.

In children with oncologic diagnoses or in patients undergoing hematopoietic stem cell transplantation who are critically ill or at risk of critical illness and who are hemodynamically stable, an Hb concentration of 7 to 8 g/dL is suggested as a threshold for red blood cell transfusion. For platelet transfusions, both the ICTMG and ASCO advocate a threshold of 10×109/L for prophylactic platelet transfusion, and children undergoing hematopoietic stem cell transplantation for sickle cell disease are at high risk for intracranial hemorrhage, so the platelet count should be at least 50×109/L in the period immediately after transplantation. There are no specific data for plasma transfusions in oncologic patients, and standard indications established for critically ill children are used in clinical practice. More limited to children with hematologic and oncologic disease, granulocyte transfusions may be considered in children with an absolute neutrophil count less than 500/mL or known neutrophil dysfunction and invasive clinical infection with demonstrated inadequate response to antimicrobial therapy.

In addition to selecting the type, timing, and dosage of blood product, the decision for leukoreduction, irradiation and washing is critical in pediatric oncology patients.

Further research surrounding indications, risk, benefits, and alternatives to RBC transfusion in critically ill children with oncologic diagnoses or undergoing hematopoietic stem cell transplant is sorely lacking. Although strong evidence-based guidelines for this patient population do not exist, given the morbidities associated with the receipt of blood products, practitioners should attempt to use restrictive transfusion strategies.

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Sp07

APPROACH TO PAIN MANAGEMENT

Tuba Eren

Trakya University, Faculty of Medicine, Department of Pediatrics, Division of Pediatric Hematology-Oncology Edirne, Turkey

International Association for the Study of Pain describes pain as 'An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage' (1). The phenomenon of pain is a common and underdiagnosed distressing symptom, resulting from the interaction between neural pathways and neurochemical mediators. An important group that suffers from acute and chronic pain -both at the beginning of the disease and in the later stages- are pediatric cancer patients. It is known that more than half of all children with cancer experience moderate to severe pain. Management of pain in childhood cancer plays an important role in patients' life quality and compliance with their treatment. Moreover, it is thought that uncontrolled pain may have negative effects on immune system functions, wound healing, tumor growth, and gastrointestinal functions through cortisole and neurochemokines that occur as a result of pain (2).

Pain can be categorized into three types for determining the etiology which may guide treatment choices:

Nociceptive pain: Tissue injury and inflammation cause activation of nociceptors by inflammatory mediators and activate neurons that transmit the pain. Bone metastasis and mucositis are examples of this group. 'Somatic Nociceptive pain' is typically well localized and described as sharp, aching, squeezing, stabbing, or throbbing. Visceral Nociceptive pain' is often described as dull or crampy.

Neuropathic pain is caused by nerve injury (resulting from compression, transection, infiltration, ischemia, or metabolic injury to the nerves) and can be described as burning, scratching, tingling or with numbness.

Nociplastic pain occurs without evidence of tissue or nerve damage. The mechanisms are not well understood. It is thought that dysfunction of the pain signals of central nervous system plays a role (1).

Assessment of the severity of pain in children is more difficult than adults and it is related to the child's age, cognitive ability and clinical condition. Observational– behavioral scales consider child's reaction to pain for younger children or cognitively impaired patients. The most common scales are FLACC (used for children < 3 years), facial expressions in the Wong-Baker pain scale for 3-8 ages, and numericale valuations in the Wong-Baker pain scale for children older than 8 years (3).

Multidisciplinary and individualized pain management incorporating pharmacological and non-pharmacological