

F O R E W O R D

Haematological malignancies in Qatar: from childhood to adulthood

Haematological malignancies are the most common pathologies affecting children, adolescents and young adults. The commonest types are lymphoma, leukaemia and myeloma but they also include myelodysplastic syndromes or myeloproliferative diseases. The majority of patients diagnosed with hematologic malignancies can now be cured. These advances have predominantly resulted from the introduction of a wide range of cytotoxic chemotherapeutic regimens, radiotherapy or a combination of both. Although overall survival has increased, adverse effects of treatment, both in the short and long term, may effect on the overall the quality of life of the survivors.

This supplement of Acta Biomedica is subdivided into 3 sessions: A review paper on “**Testicular damage in children and adolescents treated for malignancy**”, prepared by clinicians from Italy, Qatar and Greece, an **original article and four case reports in adulthood**.

The impact of treatment on future fertility is of significant concern, both to parents and patients. Fertility preservation options for the pediatric cancer patient differ from those in adults due to differential toxicities of treatment regimens and relative immaturity of pediatric germ cells. Thus, clinicians providing care to childhood cancer survivors need to incorporate these discussions into routine clinical care.

Given that up to half of childhood survivors will suffer a therapy-related endocrinopathy, pediatric endocrinologists are frequently involved in their care. Therefore, a strict collaboration is needed between oncologist and endocrinologist.

The Pediatric Endocrinology and Hematology and Oncology Section of Hamad Medical Corporation (HMC) in Doha are a good example of this strict collaboration for the treatment of therapy-related

endocrinopathies in children, adolescents and young adults with oncology problems and hemoglobinopathies. Several publications in international journals have been reported by this joint collaborative group in the last decade.

Here, they present an original article on “**The Impact of Iron Overload in Patients with Acute Leukemia and Myelodysplastic Syndrome on Hepatic and Endocrine functions**”. Iron overload is common in patients with hematologic malignancies requiring repeated blood transfusions and may have a deleterious effect on the outcome of these patients. These findings have led to the suggestion that iron overload is common and may have deleterious effects in these patients. Therefore, an oral iron chelation therapy has been recommended to decrease these morbidities.

The heterogeneous nature of the haemopoietic and lymphoid cells, their individual kinetic characteristics and the disseminated nature of haemopoietic and lymphoid tissue explains the complexity of haematological malignancy. There are three major groups: leukemia, lymphoma, and plasma cell neoplasms. Haematologic neoplasms are markedly heterogeneous, with more than 35 subtypes of acute leukaemias, 35 subtypes of non-Hodgkin lymphoma and six subtypes of Hodgkin lymphoma currently recognised. The classification of haematological malignancy has changed markedly over recent decades, and will continue to do so as innovative diagnostic methods and techniques are developed. Moreover, the diagnostic complexity of haematological malignancies is mirrored by the wide diversity of treatment pathways.

Every practicing hematologist/oncologist or primary care physician in the professional life encounters patients with uncommon, rare or complex

hematologic malignancies. Four **case reports**, from the large series of patients followed at Department of Hematology, NCCCR, Hamad Medical Corporation (HMC), Doha, Qatar, are presented and discussed.

We hope that oncologists, hematologists, pediatricians and physicians will find this supplement of *Acta Biomedica* a valuable resource for their current medical practice.

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