

“How to improve the survival rates and quality of life of children and adolescents with cancer or leukemia: The role of the pediatrician and the family doctor”

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Cancer and leukaemia in children and adolescents (CLCA) are recorded with an increasing incidence over time. They constitute a major cause of mortality and morbidity in this age group. They are the leading cause of disease related mortality in the pediatric population in many developed, high income countries. Nevertheless, in these well-resourced countries the outcome and survival rates for the majority of pediatric cancer patients have been significantly improving over the last few decades with cure rates in the order of 80%. On the contrary, in the less-developed countries where most cases of CLCA are diagnosed, the majority of these patients do not survive because of insufficient resources for a successful management and outcome. This situation is unsatisfactory and has to change. Our actions nationally and globally should be centered on improving a) diagnosis and therapy, b) facilitating fundamental research so that the advances achieved would be applied (translational medicine) with innovative therapies in the frame of collaborative, international protocols, c) support the search of etiology by the means of descriptive, and in particular, of analytical epidemiology studies, and d) promote national plans where health professionals and others would cooperate for improving not only the cure rates but also the quality of life of children and adolescents with cancer or leukemia during the therapeutic phases, but also for the survivors in their adult life. Our model of approach is based on 12 pillars of actions for which the role of the community pediatrician and the family physician (CP&FP) is of capital importance in our quest for improving the cure rates and the quality of life of patients and survivors. The 1st sector of actions (SA) is the continuous education of the CP&FP for the timely diagnosis. As the first line health counselors, they should be ready to promptly recognize conditions necessitating immediate exploration. The 2nd SA is increasing awareness and skills of the CP&FP for the clinical detection of signs of the de novo or acquired cancer predisposition syndromes (CPS). The contribution of the CPS in CLCA appears to be much higher than what it was thought before. Recognizing them promptly can increase survival rates and decrease morbidity by establishing adapted personalized therapy and/or surveillance protocols. The 3rd SA should improve the ability of the CP&FP not only to refer the patient whenever there is a high degree of suspicion for a malignant disease but also to know when to refer to the Pediatric Geneticist for further exploration. The 4th SA focuses in helping the CP&FP in the management of the short term complications of cancer therapies, monitor the common problems, acquire pain control knowledge and provide assistance in nutrition issues. The 5th SA is monitoring the medium and long term toxicities or adverse effects. As patients and also survivors may experience serious late effects, it is of capital importance for the CP&FP to recognize the problems and provide adequate advice and management. The vaccinations issues before, during and after cancer therapies for CLCA is a continuously evolving and sometimes controversial issue and therefore they constitute the 6th SA. In the era of internet and the overwhelming, often inaccurate information, providing correct guidance and information to the patients is of primordial importance. Therefore our 7th SA is helping the CP&FP in acquiring the skills for providing this much needed adequate medical information and thus protecting the patients from unproven therapies and charlatans. The provision of psychological support and social assistance is a field in which the CP&FP can have one of the most important roles and therefore this domain constitutes our 8th SA. As the role of the CP&FP is decisive in preventing adulthood cancer through education of the very young and their parents, the 9th and 10th SA focus is precisely in these issues. Monitoring the quality of life of CLCA during therapy and when cured, can decrease morbidity and increase survival and therefore this is the 11th SA. Finally the survivorship issues with the much needed medical, social, professional and psychological support is of increasing importance as the number of childhood cancer survivors is constantly increasing. Although these SA can be dealt and grouped differently, we believe that by individualizing and approaching each one of them as a separate entity, we may yield better results in awareness and effective actions with substantial improvements of the survival rates and quality of life of children and adolescents with cancer or leukemia in our country.
