

Materials and Methods: incidence and survival analysis data of children diagnosed with cancer were determined using the routine data from hospital-based cancer and population-based cancer registries. Children aged 0 to 14 years old from Bihor and Timis counties diagnosed from the beginning of January 1981 to the end of December 2000 to whom the diagnosis was histologically or cytologically confirmed were included in the study. The basic statistic included: the absolute number of cases, the relative or percentual incidence, the age specific rates, cumulative and age-standardized rates. The direct method of standardization and the standard European population were used. Five years interval data from 1981 to 2000 are analysed and displayed. Estimation of survival by five years interval is presented then. Confidence interval was the statistical test used for specific incidence rates and for the difference of the rates.

Results: 702 children with cancer were diagnosed, the overall age-standardized rate of cancer in children varying between 12/100000 and 15,1/100000. About a third of all childhood cancers are leukaemias (31%), predominant acute lymphoblastic leukemia (26%); on the contrary to the international references lymphomas are the second most common diagnostic group (19%), and non-Hodgkin lymphoma has higher incidence (13,5%) than Hodgkin's disease; brain tumors account for 15% of registrations, neuroblastomas and Wilms tumors for 6% and 5% respectively, bone tumors for 6%, soft tissue tumors for 4% and retinoblastoma for 3% of all childhood cancers. Age standardized rates and cumulative rates by cancer type showed small differences among the incidence of the same cancer type over the time; there is no increasing or decreasing incidence tendency (time trends) by cancer type. International comparison: age standardized rates are increased for lymphomas and are decreased for brain tumours, neuroblastomas and soft tissue tumours over almost all periods of time. Survival analysis: very low survival probabilities at the beginning of the study; survival accounting over 60% during the years 1996-1998.

Conclusions: improvement of epidemiological research data quantification on pediatric oncologic patients is imperative; therefore to develop in many parts of our country strategies for uniform and systematic data collection and analysis is a very important objective.

654

POSTER

Symptomatic avascular necrosis of the femoral head in children with ALL.

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Avascular necrosis of the femoral head (AVNFH) in childhood ALL is reported in 1-17% of children. In an attempt to evaluate the incidence of symptomatic AVNFH in children with ALL treated aggressively in our department from 2/89 to 12/01, we retrospectively studied 245 children given at least one course of Reinduction which included Dexamethasone. Of the 245 children, 134 were boys and 111 were girls, age 6 months to 15 years, and among them in 6 (4 girls and 2 boys) age > 12 in 3/6 symptomatic AVNFH was documented in first remission after the Reinduction course and while in maintenance therapy (0.025%). Only 1 of 6 had received prophylactic CNS irradiation. The lesion was seen in plain films and in MRI and was unilateral in 4 and bilateral in 2. All 6 children were approached conservatively with avoidance of weight bearing and physical therapy and in all 4 with unilateral involvement the disease subsided whereas in the bilateral disease in one there is progression and in the other clinical and radiological steady state.

Conclusions: Symptomatic AVNFH is a rare complication in our group of patients with ALL more common in adolescent girls and it may be attributed to prolonged therapy with steroids (Prednisone, Dexamethasone). Early diagnosis will lead to conservative care and avoidance of serious dysfunction of the extremity.

655

POSTER

Dental abnormalities in long-term survivors of childhood cancer

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Purpose: To determine the frequency and type of dental abnormalities

among children diagnosed of cancer and treated with chemotherapy and/or radiotherapy in a sole institution.

Patients and Methods: Fifty-two patients diagnosed of cancer in our hospital between 1980 and 1993 were included. They were younger than 10 years of age when chemotherapy and/or radiotherapy was administered and remained in continuous remission. All patients were evaluated with oral examination at least 5 years after diagnosis. Panoramic radiographs were done looking for dental abnormalities. We recorded the following findings: hypodontia, microdontia, enamel defects, root stunting and excessive number of caries.

Results: Dental abnormalities were found in 53.8% of the patients. The main findings were hypodontia in 48%, root stunting in 15.3%, microdontia in 15.3%, enamel defects in 3.8% and total absence of the root in 1.9%. The dmf index (decayed missed and filled deciduous teeth) was 3.3. An interventional program was applied when anomalies suitable to be repaired were detected.

Comments: Children treated with chemotherapy and/or radiotherapy were at high risk for abnormal dental development. Due to the abnormalities found in these patients, a special surveillance is required with an appropriate odontologic care. A protocol for improving the dental health of children with cancer has been designed in order to be applied during and after treatment

656

POSTER

Gonadal toxicity following treatment of lymphoma in childhood

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Objective: To evaluate late effects of treatment on gonadal function in children with Hodgkin's disease (HD) and non-Hodgkin's lymphoma (NHL).

Methods: Gonadal function was assessed in 26 patients with HD and 32 patients with NHL. Twenty one boys and 5 girls with HD were treated with three cycles (stage I-II) or six cycles (stage III-IV) of combination chemotherapy (COPP/ABVD) and involved field low dose radiotherapy (20-25 Gy). Patients with NHL (25 boys, 7 girls) were treated with modified BFM-90 and LMT-89 protocols. Median age at diagnosis were 8.5 years (range; 3-14) in the HD group and 7.7 years (range; 3.3-16) in the NHL group. Gonadal function was evaluated at a median of 6.4 years and 5.7 years after treatment respectively.

Results: Of 21 male patients with HD four had elevated FSH, one had elevated LH and 9 had low testosterone levels. Three patients had small testes. Out of 7 patients in whom semen analysis was performed two had azoospermia, four had oligospermia and one had normospermia. All female patients had normal estradiol and LH levels. One had raised FSH. Of 25 patients with NHL 6 had elevated FSH, 7 had elevated LH levels and 16 had low testosterone levels. Three patients had small testes. Out of 8 NHL patients in whom semen analysis was performed two had azoospermia, 5 had oligospermia and one had normospermia. All female patients had normal FSH, LH and estradiol levels.

Conclusion: There is a high incidence of germinal epithelium damage and a lesser degree of Leydig cell dysfunction in male patients treated for HD and NHL in childhood. Ovarian function appears to be less severely affected.

657

POSTER

The therapeutic approach - a main prognostic factor in paediatric acute lymphoblastic leukemia

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Background: Acute lymphoblastic leukemia (ALL) is a heterogeneous haematological disorder with a multifactorial dependent evolution. The quality of the therapeutic approach is without any doubt, accepted to have a definite prognostic impact on the overall survival (OS) of patients with ALL. Our objective was the analysis of the results obtained through medical assistance in paediatric ALL, while attempting to define the factors with prognostic value on the OS, with a special emphasis on the treatment as a prognostic factor.