

15 years, were reviewed. 11 patients were neuroblastoma, 3 were nonhodgkin lymphoma and the last were rhabdomyosarcoma. Male/female ratio was 1.2, the median age was 5.2 years, 9 patients went to surgery for tumour resection and laminectomy, others were treated with chemotherapy after biopsy. After treatment, 3 of severely affected 6 patients, who presented with paralysis, completely recovered neurologic function. 2 of 4 patients with moderate deficits, consisting of paresis and bowel/bladder dysfunction, completely recovered neurologic function. 7 children, who had mild symptoms comprised of paresis alone, fully recovered.

The frequency of complete neurologic recovery in children with intraspinal mass inversely correlated with the severity of the presenting neurologic deficits. The time passed between the first symptom and treatment was also important for neurologic recovery.

1468 ANALYSIS OF SURVIVIN GENE POLYMORPHISM AND SURVIVIN EXPRESSION IN WILMS TUMOURS IN SERBIAN CHILDREN

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Survivin, an apoptotic inhibitor, is overexpressed in various types of cancer. It has been shown that single nucleotide polymorphisms in the survivin gene promoter can modulate survivin expression and consequently influence the risk for some cancers. The aims of the present study were to:

- analyze by means of PCR/RFLP, genotype and allele frequencies for the promoter -31 G/C polymorphism in the survivin gene of 59 Wilms tumour (WT) patients and 82 controls,
- determine cytoplasmic and nuclear survivin expression in WTs using immunohistochemical methods.

The frequencies of alleles and genotypes were significantly different between patients and controls for the -31 G/C polymorphism. Individuals with CC and CG genotypes had significantly decreased risk of WT compared to GG individuals (OR 0.26, 95% CI 0.07–0.96; OR 0.30, 95% CI 0.15–0.60). A statistically significant difference in cytoplasmic survivin expression between lower and higher grades tumours has been detected as well ($p=0.000$), but without correlation with the genotypes. Our findings suggest that both survivin genotypes and survivin expression, though not showing direct relationship, represent relevant risk/prognostic markers for WT in Serbian population.

1469 20 YEARS CASE REVIEW ON HEPATOBLASTOMA IN NORTHERN IRELAND

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Aims To look at the incidence, management and outcome of Hepatoblastoma over 20 years period in Northern Ireland.

Methods A retrospective audit conducted in December 2011. Data collected from medical notes of all children diagnosed with Hepatoblastoma from Jan 1991 to Nov 2011 (14 patients), using an Audit proforma sheet.

Results Age at presentation: < 2 years-11 patients (79%), 2 to 15 years-3 patients (21%).

AFP level: High in all patients ranging from 12,589 to 3,140,000 KU/L.

Platelet count: Abnormally high-8 patients (57%), Normal-6 patients (43%). **LFT:** Deranged-11 patients (79%), Normal-3 patients(21%).

Clotting screen: Normal-11 patients (79%), Deranged-2 patients (15%), Not performed-1 patient (7%).

Staging: Pretext II-7 patients (51%), Pretext III-3 patients (21%), Pretext IV-3 patients (21%), Awaited-1 patient (7%).

Diagnosis: Non Metastatic Hepatoblastoma-Standard risk 8 patients (58%) and High risk 3 patients (21%),Metastatic Hepatoblastoma 3 patients (21%).

Pre-op chemotherapy: SIOPEL one-1 patient (7%),SIOPEL three-8 patients (57%), SIOPEL four-5 patients (36%).

Chemotherapy treatment: On time-11 patients (79%), Delayed-3 patients (21%).

Timing of surgery from initial diagnosis: 10 patients (70%) 2–4 months, 2 patients (15%) 4–5 months, 2 patients (15%) awaiting.

Type of Surgery: Orthotopic liver transplant-3 patients (21%), Partial hepatectomy-9 patients (64%), Awaiting-2 patients (15%).

Associated syndrome: Present (Beckwith-Wiedemann syndrome, Fanconi syndrome and 2 parents had familial polyposis coli)-4 patients (30%), Absent-10 patients (70%).

Post-op chemotherapy: SIOPEL one-1 patient (7%), SIOPEL three-7 patients (50%), SIOPEL four-3 patients (21%), Not applicable-1 patient (7%), Awaited-2 patients (15%).

Complications of chemotherapy: Yes (Hearing loss)-3 patients (21%), Nil-11 patients (79%).

Outcome: Remission-10 patients (70%), Died-2 patients (15%), Undergoing treatment-2 patients (15%).

Conclusions

Incidence Overall 0.02 per 100,000 versus 2 per 100,000 worldwide.

Platelet count: Abnormally high in 57% patients.

Survival rate: Overall 83.5% (10/12) versus 70% worldwide.

1470 ESTIMATION OF CIRCULATING SVCAM-1, SESELECTIN AND SIL2R IN CHILDREN WITH ACUTE LYMPHOBLASTIC LEUKEMIA

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Background Measurement of some circulating endothelial adhesion molecules and soluble receptors levels have been suggested as additional tools for assessment of patients with acute lymphoblastic leukemia (ALL). The aim of this study is to estimate sVCAM-1, sEselectin and sIL2R levels in the serum of cases with childhood acute lymphoblastic leukemia, comparing their levels before and after chemotherapy and comparing them to the control group. Moreover patients were categorised into responder and non-responder.

Patients and Method This study included ninety subjects attending National Cancer Institute; Twenty newly diagnosed patients with acute lymphoblastic leukemia (ALL) before starting chemotherapy, 40 patients with ALL after chemotherapy. 10 patients in partial remission and 20 apparently normal subjects within the same age and sex range, as a control group. Acute lymphoblastic leukemia diagnosis was made by bone marrow aspiration, cytochemistry and microscopic examination. Flowcytometer was used for immunophenotyping to confirm the diagnosis using monoclonal antibodies. SVCAM-1, sEselectin and sIL2R were estimated using enzyme-linked immunosorbent assay.

Results There were significant increases in the three estimated parameters in patients before chemotherapy as compared to after treatment as well as to the control group.

Conclusion The levels of some soluble circulating adhesion molecule and soluble receptors levels can be utilized for monitoring the disease activity of ALL and its response to treatment.

1471 **PROTOCOL BFM-95 IN TREATMENT OF CHILDHOOD ACUTE LYMPHOBLASTIC LEUKEMIA (ALL) AND LYMPHOBLASTIC LYMPHOMA (LL)**

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Introduction ALL and LL as the most common malignant diseases in childhood are two related malignancies that are treated by the same protocols.

Aim The aim of the study is to see the outcome of the application of protocol BFM-95 in the treatment of ALL and LL in childhood in Macedonia in the period 2000–2007.

Method We analyzed the medical records of 88 pediatric patients treated at Department of Hematology and Oncology at the University Pediatric Clinic in Skopje, 69 of which with ALL and 19 with LL.

Results The annual average registered patients with ALL was 8.6 and 2.4 patients with LL. At the end of the study 85.5% patients with ALL and 42.1% patients with LL were alive. Regarding the outcome of the examined patients there were statistically significant differences between the two groups ($p=0,0075$). There is a strong correlation between the type of disease and the outcome of the disease in patients ($p=0,00001$). Relaps was registered in 7.3% patients with ALL and in 31.6% patients with LL, where the analysis showed that between the two studied groups there is statistically significant difference ($p=0,0079$). There is a correlation between the type of disease and the occurrence of relapse ($p=0,0149$). According to Kaplan-Meier-survival curve, a 5-year overall survival is 92.3% in the group with ALL and 43% in group with LL.

Conclusion Although these two related cancers are treated with the same protocols, with current therapeutic approaches the outcome is better for patients with ALL compared to patients with LL.

1472 **ULTRASOUND IMAGING OF ABDOMINAL MALIGNANCIES IN NEONATES AND FETUSES**

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Purpose To study cases of the diagnosis of main abdominal malignancies in infants in the neonatal period and to review the effectiveness of ultrasound for these pathology from the fetus.

Patients and Methods A retrospective analysis of clinical and anamnestic data of the first month of life of children with retroperitoneal neuroblastoma, hepatoblastoma, renal tumors, who were treated in a two Belarusian cancer centers for the period from 1995 to 2011 were made. In the study group were included 16 neonates: 9 - with neuroblastoma, 3 - with hepatoblastoma, 4 - with mesoblastic nephroma.

Results It is established that the primary method of prenatal and postnatal diagnosis of the main forms of malignant abdominal tumors in all cases were the ultrasound diagnostic study. No there were neonates with nephroblastoma in this study. The highest diagnostic efficacy of ultrasound in the perinatal period has been observed in cases of mesoblastic nephroma. Half of them were diagnosed prenatally. Value for prenatal and postnatal diagnosis for neuroblastoma was 1:8. Prenatal detection of hepatoblastoma in the observed cohort of infants was ineffective. Postnatal volume this tumor was 150–282 ml. This are were definitely a congenital tumor.

Conclusions Ultrasonography is a method of choice for initial imaging of the tumors in the neonatal period. Obviously, there are diagnostic reserves for increased efficiency of prenatal detection of malignant and potentially malignant abdominal tumors. The results

can be useful when planning screening programs for children in the first year of life.

1473 **PANCREATIC NEUROENDOCRINE TUMORS IN CHILDREN**

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Objectives Neuroendocrine tumors of the pancreas are rare specifically in pediatric age group. We report a 3.5-year-old girl with four weeks of icterus and primary misdiagnosis of hepatitis A and final diagnosis of well differentiated low grade neuroendocrine carcinoma of the pancreas. With our best knowledge this is the first report of this tumor in under –5-year-group.

We highlight the patient's presentation, examination, and management as well as review the characteristics of pancreatic neuroendocrine tumors.

Methods A retrospective case study of a 3.5-years-old girl with history of 4 weeks Jaundice, weight loss, hepatomegaly and positive total anti HAV antibody without fever, abdominal pain, vomiting, or palpable mass in abdominal examination.

Results IgM anti HAV, HBs Ag, and HCV Ab were all negative except for IgG anti HAV. Abdominal CT scan with oral and IV contrast revealed an intermediate enhancing mass in pancreatic head suggesting hypervascular pancreatic mass lesion. Examination and immunohistochemical staining of the tumor revealed well differentiated neuroendocrine carcinoma with extension to duodenal wall and lymph node metastasis.

Conclusion Despite of low incidence, the pediatricians should be aware and consider tumors in differential diagnosis of jaundice in children specifically if prolonged. In addition total anti HAV Ab test for diagnosis of hepatitis A should be discouraged.

1474 **ACUTE BRONCHIOLITIS? OR A THORACIC MASS IN AN INFANT**

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A 7-month old girl with the complaints of crying, cyanosis and breathing rapidly was brought to a hospital by her family. After taking nebulised salbutamol, the symptoms relieved. However, the symptoms reoccurred despite appropriate acute bronchiolitis treatment. She was hospitalized due to massive right thoracic infiltration in the chest x-ray. During evaluation, thoracic ultrasound showed a suspicious solid mass at the posterior mediastinum. Thorax computerised tomography revealed a right hemithoracic and posterior mediastinal gross solid mass. As the staging procedure, bone marrow aspirations were done which resulted in normal findings. The trucut biopsy of the thoracic mass resulted as small round blue malignant tumor cells consistent with peripheral neuroectodermal tumor/ewing sarcoma which was very rare in this age group.

1475 **VALUE OF BLOOD BIOMARKERS TO IDENTIFY YOUNG FEBRILE INFANTS DIAGNOSED WITH UTI AT HIGHER RISK FOR BACTEREMIA. INITIAL RESULTS**

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