retinoblastoma. **Conclusion:** MPO deficiency may occur primarily as well as secondary. A number of point germ line mutations cause primary MPO deficiency. Most patients asymptomatic without an increase in infection. Severe infectious complications were not observed in any of our patients. We wanted to emphasize that MPO deficiency should also be kept in mind in patients whose neutropenia etiology was investigated.

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LEUKEMIA

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CHARACTERISTICS AND OUTCOME OF T(8;21)-POSITIVE CHILDHOOD ACUTE MYELOID LEUKEMIA: A SINGLE INSTITUTION'S EXPERIENCE

Volkan KÖSE, Dilek KAÇAR,
Özlem ARMAN BİLİR, Ayça KOCA YOZGAT,
Hüsniye Neşe YARALI

Division of Pediatric Hematology and Oncology, Ankara City Hospital, University of Health Sciences

Objective: Compared with other cytogenetic acute myeloid leukemia (AML) groups, patients with core-binding factor AML (CBF-AML) are considered as a favorable AML risk group based on their high remission rate and survival probabilities. However, up to 30-40% of these patients can still relapse after standard intensive induction and consolidation chemotherapy. **Methodology:** From 2004 to 2020, 147 AML patients reviewed. Ten of 147 patients were followed up with t(8;21) chromosomal anomaly. The t(8;21)(q22;q22) was detected by reverse transcription polymerase chain reaction (RT-PCR) and/or floresan in situ hibridizasyon (FISH). We analyzed patients' demographic data: sex, white blood cell count at diagnosis, central nervous system status, additional cytogenetic anomaly and recurrence rates, stem cell transplant status and survival rates. **Results:** Two of 10 patients were female. The median age was 10 years (3-17 years). Median followup was 36 months (2-114 months). The mean white blood cell count of 10 patients was 21.5 ($\times$ 109/l) at diagnosis. One out of 10 patients had granulocytic sarcoma and 2 had central nervous system involvement. Additional cytogenetic anomalies were detected in 90% of the patients, of which 2 relapsed and 3 died. One patient received hematopoietic stem cell transplantation and died because of HSCT complications. **Conclusion:** Recent studies show that CBF-AML includes different groups with different clinical outcomes. We found that 50% of our patients achieved complete remission and 50% experienced relapsed disease or death. After we were able to monitor the t(8;21) level with RT-PCR, we diagnosed relapsed disease in 1 patient with additional cytogenetic anomaly. RT-PCR is essential for optimal handling of these patients to predict patients' relapse risk and to detect minimal residual disease.

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PP 67

BK-VIRUS ASSOCIATED HAEMORRHAGIC CYSTITIS CONCOMITANT WITH CHEMOTHERAPY IN AN ADOLESCENT GIRL WITH ACUTE LYMPHOBLASTIC LEUKEMIA

Aslı Turgutoğlu Yılmaz, Dilek Kacar,
H. Nese Yarali, Namik Yasar Ozbek

Department of Pediatric Hematology/Oncology, Ankara City Hospital Children's Hospital

Case report: Haemorrhagic cystitis (HC) is characterized by focal or diffuse haemorrhagic and inflammatory changes of the bladder mucosa. Polyoma BK virus (BKV) infection is an important underlying condition that provokes hematopoietic stem cell transplantation (HSCT)-related HC. Although commonly reported in transplant recipients, BKV associated HC, and tubulointerstitial nephritis rarely occurs in paediatric acute lymphoblastic leukemia (ALL) patients receiving chemotherapy. A 15-year-old girl diagnosed with T cell ALL, receiving high-risk chemotherapy protocol, complained about dysuria and lower abdominal pain with macroscopic haematuria. Her complaints started under meropenem, teicoplanin, amikacin, and caspofungin treatment due to neutropenic fever with severe mucositis. There wasn't any bacterial growth in the urine or blood culture. PCR analysis detected 2,2 $\times$ 109 copies/mL of BKV in urine. The antibiotics other than ciprofloxacin were discontinued. Her complaints are alleviated day by day. She did not experience any urinary symptoms or haematuria, and the BKV copy number declined to 3,3 $\times$ 107 copies/mL during follow-up.Contributing factors of BKV associated HC are highly relevant in HSCT recipients. However, patients receiving intensive chemotherapy may have similar conditions. A predisposing and potential manageable factor such as BKV should be searched in paediatric haematology practice.

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A CASE OF METHOTREXATE-INDUCED PHOTOSENTIVITY REACTION

Aslı Turgutoğlu Yılmaz, Dilek Gurlek Gokcebay,
Ayca Koca Yozgat, H. Nese Yarali

Department of Pediatric Hematology/Oncology, Ankara City Hospital Children's Hospital

Case report: Methotrexate is an essential drug effectively used in acute lymphoblastic leukemia. Doses above 500 mg/m2 are defined as high-dose methotrexate (HDMTX). Since HDMTX is known to cause serious morbidity, it is given with a standard