Although translocation (15;17) and PML/RARα fusion are regarded as highly specific for acute promyelocytic leukemia (APL), they have been reported in rare cases of acute leukemias that were neither morphologically nor immunophenotypically consistent with APL. However, these cases showed therapeutic response to ATRA despite non-APL features. These observations showed that morphologic, cytogenetic and molecular features must all be considered for an accurate diagnosis of APL. Our case highlights the importance of this combined approach. While the t(15;17)(q22;q21) translocation seen in this patient was indistinguishable from that in APL, the clinical and hematologic features were not compatible with a diagnosis of APL. Detailed molecular analysis showed no evidence of PML/RARα rearrangement, which confirmed that the translocation breakpoints in this patient did not involve the PML and RARα gene. In fact a similar case of AML with t(15;17) (q24.3;q21.1) not associated with APL has previously been reported, in which detailed molecular analysis did not reveal any involvement of PML and RARα genes. Interestingly, both cases showed AMI-M2 morphology and expression of stem cell antigen CD34. In addition to CD34, the present case showed multi-lineage antigen expression, suggesting the involvement of an early hematopoietic progenitor cell.

Edmond Shiu Kwan Ma, Wing Yan Au,* Thomas Shek Kong Wan, Yol Lam Kwong,* Li Chong Chan

Departments of Pathology and *Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong, China

Acknowledgments

The authors thank M.A. Pang for technical assistance. The RARα probe was a kind gift from Professor Z.Y. Wang of the Shanghai Institute of Hematology.

Correspondence

Dr. S.K.M. a, Hematology, Section, Department of Pathology, The University of Hong Kong, Queen Mary Hospital, Pokfulam Road, Hong Kong. Phone: international +852-2855 4570 - Fax: international +852-2817 7565 - e-mail: eska@hkucc.hku.hk

References


Lung toxicity following fludarabine, cytosine arabinoside and mitoxantrone (FLAN) treatment for acute leukemia

The clinical profile of pulmonary drug toxicity of fludarabine phosphate associated with other drugs, particularly cytarabine (ARA-c), is not well defined. We describe the pulmonary complications observed in two patients, treated with these drugs.

Case #1. A 31-year-old man was diagnosed as having acute myeloid leukemia M2 in October 1998. A partial remission was obtained with a course of ICE and a second course of FLAN (fludarabine 60 mg/day for 5 days; ARA-c 4,000 mg/day for 5 days and mitoxantrone 12 mg/day for 3 days) was given. Seven days after therapy discontinuation, during severe neutropenia, the patient developed fever and dyspnea (pO2 39 mmHg). The chest roentgenogram showed bilateral pulmonary ground glass opacities (Figure 1) Empirical intravenous antibiotic therapy was administered, with 0.8-1 mg/kg prednisolone. Blood cultures were positive for Staphylococcus aureus. The cytospin preparations of bronchoalveolar lavage (BAL) fluid showed a pattern of alveolar haemorrhage. After 6 days clinical symptoms and blood gas abnormalities had resolved (pO2 93.6). Transbronchial lung biopsies performed 20 days after the first BAL showed patchy alveolar shadows in the left hemithorax. An high resolution computed tomography (HRCT) showed bilateral pulmonary ground glass opacities. After 9 months of complete remission, he relapsed and was treated with FLAN. Twenty-four days after the start of FLAN therapy, the patient developed progressive respiratory distress syndrome, requiring mechanical ventilation.
Haematologica vol. 85(7):July 2000

Difficulties in the diagnosis of primary cardiac lymphomas

Primary cardiac lymphoma (PCL) is defined as a non-Hodgkin lymphoma involving only the heart and pericardium. Clinical presentations are non-specific for variable involvement of cardiac structures. We describe a case of PCL presenting with left pleural effusion. A cardiac malignancy was suspected by magnetic resonance imaging but pathological diagnosis made only after thoracotomy.

Sir,

A 78-year-old woman was admitted to our hospital with the complaint of dyspnea. She had a well controlled hypertension and suffered from Herpes zoster affecting the gluteal region one month earlier.

Physical examination revealed dullness to percussion at the base of the left lung. There was no jugular